
**U.S. Department of the Interior
Bureau of Land Management**

**Final
Environmental Assessment
December 2018 Competitive Oil and Gas Lease Sale**

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PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management
Ely District Office, Nevada



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Chapter 1 Introduction

1.1. Background Information

It is the policy of the Bureau of Land Management (BLM), as mandated by federal laws including the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976 (FLPMA), to make mineral resources available and to encourage their development to meet national, regional and local needs. The BLM Nevada State Office (NVSO) conducts competitive sales for oil and gas lease parcels in the Ely District (District). The NVSO publishes a Notice of Competitive Lease Sale that lists lease parcels to be offered at the sale at least 45 days before it is held. The BLM decides which parcels to offer based on current resource and land use information and the management framework developed in the applicable Resource Management Plan (RMP).

The Ely Resource Management Plan (RMP), signed in August 2008 identified areas closed and open to fluid mineral leasing as well as appropriate stipulations to protect resources of concern, and comply with federal law. All leases are subject to the terms and conditions of the standard lease form and additional stipulations and lease notices as identified in the Ely RMP and applied in this site-specific environmental analysis. Table 1.1 is from the Ely RMP and has been updated for lands closed to leasing by the Basin & Range National Monument proclamation and lands identified for Major Restrictions (No Surface Occupancy) in the Nevada and Northeastern California Greater Sage Grouse Resource Plan Amendment (ARMPA), 2015.

Table 1.1 Summary of Fluid Mineral Leasing Designations in Ely District

Ely District Office Area	Acres (approx.)
Open to Fluid Mineral Leasing	
Standard lease Terms and Conditions/ Moderate Restrictions (Timing/Surface Use Limitations)	7,999,400
Major Restrictions (No Surface Occupancy)	1,393,600
Open-Total	9,393,000
Closed to Fluid Mineral Leasing	
Designated Wilderness/Wilderness Study Areas	1,815,400
Discretionary Closures	291,600
Closed-Total	2,107,000
Grand Total	11,500,000

The first oil discovery in Nevada occurred in 1954 in Railroad Valley. Railroad Valley is the predominant area of oil and gas production in Nevada. Nevada's only oil refinery is located in Railroad Valley. Most of the valley lies in Nye County, but it crosses into White Pine County at its northern end. Since 1907, over 970 wells have been drilled in Nevada. This includes about 270 wells drilled since 1986 of which about 50 were producers. The late Tertiary volcanic rocks constitute the main reservoir of the oil fields in the Railroad Valley petroleum province. However, the Chainman Shale and the Pilot Shale of Mississippian age are the potentially oil-bearing formations most often targeted in the majority of the analysis area.

1.2. Purpose and Need for Action

The purpose of the Federal Action is to provide opportunities for private individuals or companies to explore and develop oil and gas resources on specific public lands through a competitive leasing process.

The need for the proposed action is to respond to the nomination or Expressions of Interests (EOIs) for leasing, consistent with the BLM's responsibility under the Mineral Leasing Act (MLA), as amended and modified by subsequent legislation and regulations found at 43 CFR 3100, to promote the development of oil and gas on the public domain. BLM authority for leasing public mineral estate for the development of

energy resources, including oil and gas, is described in 43 CFR 3160.0-3. The public, BLM, or other agencies may nominate parcels for leasing.

The MLA established that deposits of oil and gas owned by the United States are subject to disposition in the form and manner provided by the MLA under rules and regulations prescribed by the Secretary of the Interior, where consistent with land use planning, FLPMA and other applicable laws, regulations, and policies.

1.3. Decision to be Made

The Ely District Office would determine whether or not to recommend leasing all or part of the nominated parcels in the upcoming December 2018 Competitive Oil and Gas Lease Sale to the Nevada BLM Deputy State Director for Minerals Management by October 7, 2018. The Ely District must also determine which notices and stipulations must be attached to the parcels at the leasing stage in order to help protect resources while allowing for exploration and development of mineral resources. The BLM Deputy State Director of Minerals would make the final decision and sign the Decision Record (DR).

The decision to be made is only to identify which parcels are to be leased and which notices and stipulations must be attached to those parcels. The lease does grant certain rights but it does not authorize any ground disturbance or development of the leased parcels. Any development of the leased parcels would be subject to additional NEPA analysis.

1.4. Conformance, Permits, and Approvals

1.4.1. BLM Land Use Plans

The Proposed Action is in conformance with the Goals and Objectives of the Ely District Record of Decision and Approved Resource Management Plan (BLM 2008a, the Ely RMP), as amended, which are to: *“provide for the responsible development of mineral resources to meet local, regional, and national needs, while providing for the protection of other resources and uses (page 92).”* The RMP also states in part, *“It is BLM policy to apply the least restrictive constraint to meet the resource protection objective (page 97).”* In addition, *“Timing limitations indicate that a leased area generally is open to development activities except during a specified period of time to protect identified resource values such as wildlife (page 92).”* The stipulations for Fluid Minerals Lease Notices in Appendix A, Section 2 of the Ely RMP were updated February 11, 2015 under a maintenance action.

The best available science was used by Resource Specialists to analyze the effects to their respective resources as a result of the Proposed Action. Stipulations were applied off of the analysis in the 2007 Ely Proposed Resource Management Plan/Final Environmental Impact Statement and the 2008 Ely District Record of Decision and Approved Resource Management Plan.

The 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (GRSG Plan Amendment) amended all BLM land use plans in the areas addressed. Under the GRSG Plan Amendment, mapped habitat for Greater Sage-Grouse (GRSG) is designated as Sagebrush Focal Area (SFA), Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA), or Other Habitat Management Area (OHMA). The Proposed Action conforms with the following applicable sections of the GRSG Plan Amendment.

GRSG Plan Amendment Section 2.2, Management Decisions (MD) for Mineral Resources (MR), Unleased Fluid Minerals include the following MD applicable to oil and gas lease sales in PHMA and GHMA (others apply to SFA, geothermal, etc.):

- MD MR 1: Review Objective SSS 4 and apply MDs Special Status Species (SSS)1 through SSS 4 when reviewing and analyzing projects and activities proposed in GRSG habitat (these would

be applied at the time of project-specific analysis).

- MD MR 3: In PHMAs outside of SFAs, no waivers or modifications to an oil and gas lease no-surface occupancy stipulation would be granted.
- MD MR5: In GHMAs, manage oil and gas and geothermal fluid minerals with moderate constraints, timing limitations and controlled surface use stipulations.

Greater Sage-Grouse Plan Amendment Appendix G, Fluid Mineral Stipulations, Waivers, Modifications, and Exceptions, specifies the stipulations to apply to each habitat type and describes conditions under which exceptions, modifications, or waivers may or may not be applied. The stipulations have been applied to each part of a parcel with GRSG habitat, down to the 40-acre quarter-quarter of a section, using the highest applicable level of protection (e.g. if a quarter-quarter section includes PHMA and GHMA, stipulations for PHMA are applied).

On December 27, 2017, the BLM issued Instruction Memorandum 2018-026: Implementation of Greater Sage-Grouse Resource Management Plan Revisions or Amendments – Oil & Gas Leasing and Development Prioritization Objective, which provided new guidance as to how to implement the oil and gas leasing objectives found in the existing sage grouse ARMPAs. The policy clearly states that the BLM does not need to lease and develop outside of GRSG habitat management areas before considering any leasing and development within GRSG habitat. This policy allowed for the BLM to efficiently conduct lease sales and permit oil and gas development while still protecting GRSG and GRSG habitat.

On August 21, 2017 the Ely District BLM requested reinitiation of formal consultation with the Fish and Wildlife Service (FWS) of the District's Programmatic Biological Opinion (PBO) completed in 2008 as part of the Ely RMP. Reinitiation was requested to add species that had been listed and documented within the District since RMP was completed and to include updated information and effects analysis for oil and gas development and other programs. The BLM also requested concurrence for 7 listed species in various programs that were not included in the 2008 PBO. As a result of formal consultation with the FWS, it was determined that the actions analyzed "may affect, but are not likely to adversely affect, the Mojave desert tortoise, southwestern willow flycatcher, yellow billed cuckoo, Railroad Valley springfish, White River spinedace, White River springfish, Hiko White River springfish and Pahrangat roundtail chub." As a result no changes were made to the Ely RMP or the stipulations found in Appendix A, Section 2.

This document is tiered to, and incorporates by reference, the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (BLM 2007, the RMP/FEIS), the Ely RMP (2008a) and the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. This document also incorporates by reference Section 3.3.1 of the 2017 Competitive Oil and Gas Lease Sale Environmental Assessment, Air Quality and Climate Change (BLM 2018).

1.4.2. Relationship to Statutes, Regulations or Other Plans

The proposed action is in compliance with federal laws and regulations, Executive Orders, and Department of Interior and BLM policies and is consistent, to the maximum extent possible, with state laws and local and county ordinances and plans, including the following:

- Federal Land Policy and Management Act (1976) as amended and the associated regulations at 43 CFR Part 1600
- Mineral Leasing Act (1920) as amended and the associated regulations at 43 CFR Part 3100
- Federal Oil and Gas Leasing Reform Act of 1987 (Reform Act)
- Energy Policy Act (2005)
- National Environmental Policy Act (1969) and the associated CEQ regulations at 40 CFR Parts

- 1500 through 1508
- Clean Water Act (1972)
- National Historic Preservation Act (1966) as amended and the associated regulations at 36 CFR Part 800
- Endangered Species Act (1973) as amended
- Bald and Golden Eagle Protection Act (1962)
- Migratory Bird Treaty Act (1918)
- BLM Manual 6840- Special Status Species Management
- 2018-026: Implementation of Greater Sage-Grouse Resource Management Plan Revisions or Amendments – Oil & Gas Leasing and Development Prioritization Objective
- Instruction Memorandum IM 2018-093 Compensatory Mitigation

1.5. Scoping, Public Involvement, and Issues

Internal scoping was conducted on May 30, 2018 by an interdisciplinary team composed of Ely District resource specialists and management who discussed the potential consequences of the proposed action. During the scoping meetings, specific parcels were recommended for delay based on resource concerns. The Ely District initiated Native American consultation for the December 2018 Oil and Gas Lease Sale on June 6, 2018. A list of tribes that were sent this consultation request can be found in Table 5.1.

Preliminary Issues identified during internal scoping are listed below:

- Federally threatened Railroad Valley springfish
- Greater Sage-Grouse and its habitat
- Impacts to Cultural Districts and Sites
- Native American Concerns
- Impacts from hydraulic fracturing
- Potential overlap of parcels with utility corridors
- Wild Horses

The BLM received approximately 5 external comments from individuals and government agencies on the Proposed Action during the initial 15-day comment period that ran from August 17- September 4, 2018. The comment period was reopened for an additional 15 day comment period from September 25-October 9, 2018. Approximately 1 external comment was received during this time. Comments received were related to potential impacts to public involvement, Greater Sage Grouse, ground and surface water, critical mule deer winter range, hydrology, lands with wilderness characteristics and livestock grazing. The most significant comments received were related to potential impacts to Lands with Wilderness Characteristics, effects to wildlife habitat, Threatened and Endangered Species, and Greater Sage Grouse. Clarification in response to comments was incorporated into the document. No substantial changes were made to the final document.

There will be a 30-day appeal period upon signature of the Decision Record (DR) by the Deputy State Director of Minerals and Finding of No Significant Impact (FONSI) by the District Manager for the Ely District Office.

Chapter 2. Proposed Action and Alternatives

2.1. Description of the Proposed Action

A list of 202 nominated parcels totaling approximately 426,531 acres was submitted to the Ely District on February 14, 2018 (see Map 1 and Table 2.1). This total acreage represents approximately 4.5 percent of the acres open to leasing in the Ely District. The parcels are located in White Pine and Nye Counties. Appendix C lists all 202 parcels, the parcel number, acreage, legal description, and Appendix D lists stipulations and notices to be applied to each parcel.

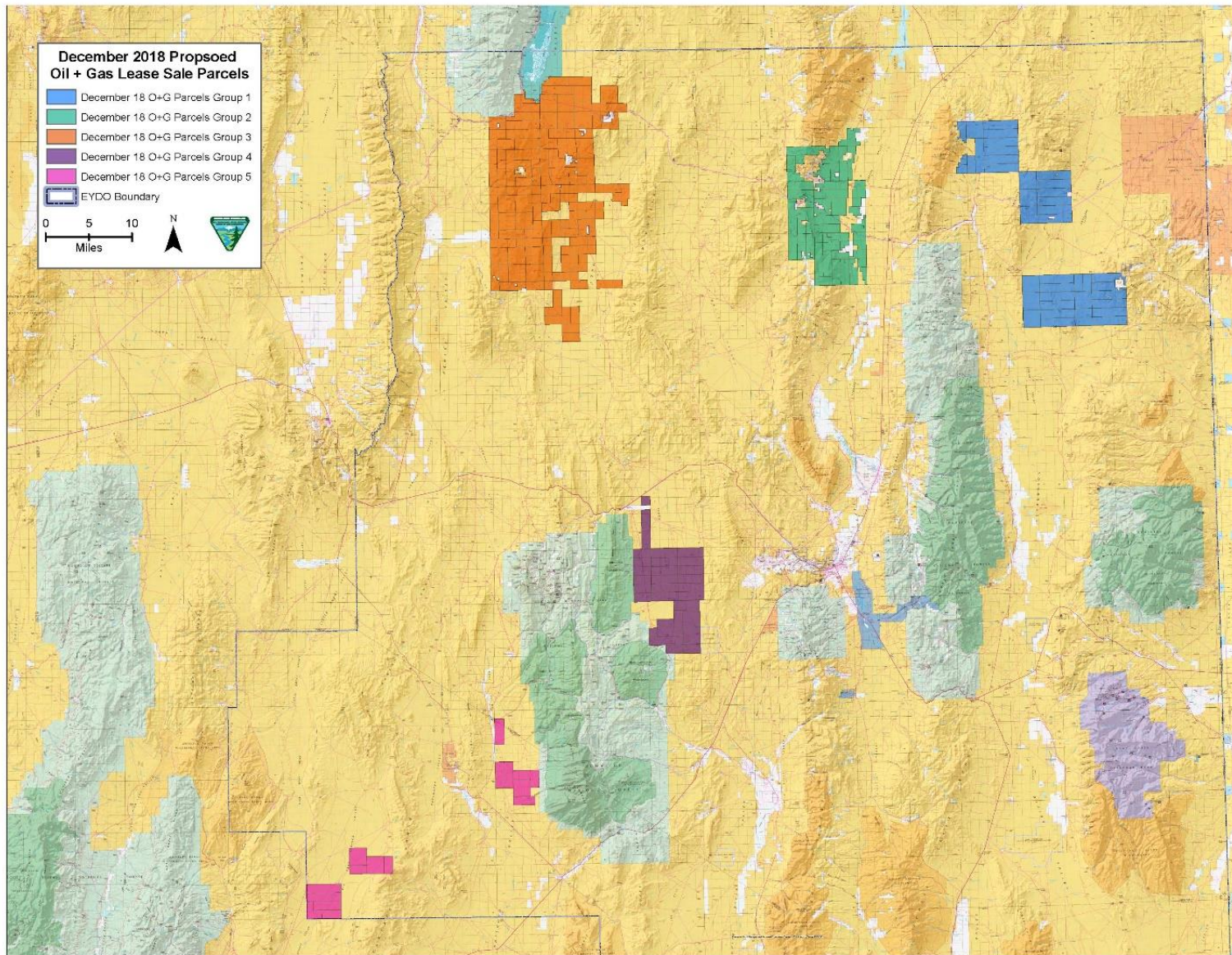
Once sold, the lessee has the ability to develop the lease by exploring, drilling, and producing all of the oil and gas within the lease boundaries, subject to the stipulations and notices attached to the lease (Title 43 CFR 3101.1–2). Leases are issued for a 10 year period and continue for as long thereafter as oil or gas is produced in paying quantities. If a lessee fails to produce oil and gas, does not make annual rental payments, does not comply with the terms and conditions of the lease, or relinquishes the lease; ownership of the lease reverts back to the federal government and the lease can be resold.

All parcels contain a Cultural Resources Lease Notice stating that all development activities proposed under the authority of these leases are subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and Executive Order 13007. All parcels also contain an Endangered Species Act (ESA) Notice, which requires compliance with Section 7 of the ESA. Standard terms and conditions as well as special stipulations listed in the RMP would also apply.

In order for a lessee to exercise their rights to explore or develop a lease, an Application for Permit to Drill (APD) must be submitted and approved. Additional NEPA analysis is prepared for these site specific plans. Site-specific mitigation measures and Best Management Practices (BMPs) (Appendix D and the Gold Book) would be attached as Conditions of Approval (COAs) for each proposed activity. Any proposed APD would be analyzed under additional project and site-specific analysis per the National Environmental Policy Act (NEPA). The level of further NEPA analysis would depend upon the results of scoping and the particulars of the proposed action.

Table 2.1 Parcel Groups for December 2018 Ely District Competitive Lease Sale

Group	Number of Parcels	Acres	Field Office	County
1	39	92,018.280	Bristlecone	White Pine
2	38	72,691.610	Bristlecone	White Pine
3	84	178,447.142	Bristlecone	White Pine
4	26	52,441.400	Bristlecone	White Pine
5	15	30,752.600	Bristlecone	White Pine and Nye
Totals	202	426,351.032		



Map 1 Nominated Parcels within the Ely District for the 2018 Competitive Oil and Gas Lease Sale

2.2. No Action Alternative

The BLM NEPA Handbook H1790–1 (BLM 2008b) states that for EAs on externally initiated proposed actions, the No Action Alternative generally means that the Proposed Action would not take place. In the case of a lease sale, this would mean that all expressions of interest to lease (parcel nominations) would be denied or rejected.

Under the No Action Alternative, the BLM would not offer the 202 lease parcels at the December 2018 lease sale. Surface management would remain the same and ongoing oil and gas exploration and/or development would continue on surrounding leased federal, private, and state lands.

2.3. Alternatives Considered but Not Analyzed in Detail

Several alternatives were proposed during the initial 15-day comment period. The following alternatives were proposed:

- No new fossil fuel leasing or use of unconventional well stimulation;
- excluding all Greater Sage- Grouse habitat from the December 2018 Lease Sale;
- deferral of leasing until Nevada is on par with other western states or until we can demonstrate lands contain oil and gas deposits;
- deferral of an important wildlife habitat and migration corridors and
- deferral of lands with wilderness characteristics.

None of the proposed alternatives would meet the purpose and need of the Proposed Action. All of the nominated parcels are located within lands classified as open to oil and gas development in the Ely RMP, to defer or exclude these parcels would cause the action to be out of compliance with the RMP. Lands with wilderness characteristics are managed for multiple use where not designated otherwise, as stated in 2008 RMP.

2.4. Reasonably Foreseeable Development Scenario

A Reasonably Foreseeable Future Development scenario (RFFD) for oil and gas is a long-term projection of oil and gas exploration, development, production, and reclamation activity. The RFFD covers oil and gas activity in a defined area for a specified period of time and provides the basis for the analysis of the environmental effects in Chapter 3 of this document. The RFFD scenario was developed based on past exploration activities and estimates of future exploration and development activity given the potential occurrence of resources (BLM 2007; page 4.18–3).

The RFFD projects a baseline scenario of activity assuming all potentially productive areas can be open under standard lease terms and conditions, except those areas designated as closed to leasing by law, regulation, or executive order. The RFFD provides the mechanism to analyze the effect that discretionary management decisions have on oil and gas activity. The RFFD also provides the basic information that is analyzed in the NEPA document. The RFFD discloses indirect future or potential impacts that could occur once the lands are leased. Prior to any future development, the BLM would require a site-specific NEPA analysis at the exploration and development stages.

Fluid mineral development potential in the analysis area is based on RFFD scenario for oil and gas developed in conformance with BLM Instruction Memorandum No. 2004–089 (BLM 2004). This analysis is based largely on the reasonably foreseeable development scenarios presented in detail in the fluid mineral report prepared for the RMP/FEIS (ENSR 2004), available at the Ely District Office. Various additional assumptions have been incorporated based on changes in the mineral markets in the recent past. It is impossible to predict with certainty how resource development would occur in the future. The interaction of prices, markets, technology, and environmental concerns all play a role.

The RFFD for the analysis area is based on the geology, oil and gas development history, oil and gas potential, BLM well data, and data from other EAs for oil and gas leases in eastern Nevada. The RFFD scenario is made without respect to any existing or proposed leasing stipulations and conditions of approval in accordance with BLM guidance. The Proposed Action does not include any surface disturbance, such as exploration, development, production, or final reclamation of oil and gas resources. However, the authorization of oil and gas leasing does convey a right to subsequent exploration and production activities subject to stipulations, restrictions from non-discretionary statutes, COAs, and other reasonable measures required to minimize adverse impacts (CFR 3101.1–2). Therefore, this EA would consider possible impacts from potential indirect effects under RFFD scenarios. The following table summarizes the RFFD assumptions in comparison to this EA extrapolated from the RMP.

Table 2.2 Ely RMP Reasonably Foreseeable Future Development Scenarios (RFFD)

Facility Type	Number of Facilities	Short-term Disturbance (acres)	Long-term Disturbance (acres)
Seismic Survey	30 miles/year	<1000	0
Exploration Well Disturbances	200 wells and 1000 miles of road	5600	590
Small Well Field Developments	40 wells	745	359
Abandoned well pads (small field)	48 wells	178	0
Large Well Field Developments	100 wells	996	432
Abandoned well pads (large field)	60 wells	222	0
Refinery Facilities	1 refinery	65	20
Total		8406	1401
Notes: Short-term applies to effects occurring in the immediate future and persisting for less than 10 years; long-term applies to effects occurring or lasting beyond 10 years (10–20 years). Summarized from Table 4.18–2 in the Ely RMP/FEIS (2007, page 4.18–5)			

2.4.1. General Assumptions for the RFFD Scenario

The following is a list of general assumptions upon which the reasonably foreseeable development scenarios is based (BLM 2007).

- The RFFD would occur over a span of 20 years.
- There would be no major regulatory changes in federal or state statutes, regulations, policy and guidance that govern the exploration and development of fluid minerals, including lease royalty provisions and lease rental fees.
- Oil prices would remain sufficiently high to stimulate continued exploration and drilling. Recent historic highs in the price of oil may stimulate exploration activity above levels of the recent past. It is possible that higher prices may persist for the next few years. The RFFD is a planning tool that was developed to accommodate the maximum development that could reasonably be expected to occur. However, actual activity levels, as with prices, cannot be predicted with certainty.
- It cannot be predicted at this time how much acreage eventually would be held by production, which is entirely dependent on the discovery of commercial oil and gas fields.
- New field discoveries would be similar in size and surface disturbance to the Trap Springs and Kate Springs oil fields within Railroad Valley.
- The RFFD scenario is made without respect to any existing or proposed leasing stipulations and conditions of approval in accordance with BLM guidance.

- Actual locations of potential exploration wells and field development are unknown. The impacts associated with these activities are likely to occur anywhere within the planning area that is of high, moderate, or even low potential for oil and gas resources.

2.4.2. Exploration Drilling and Production Assumptions

Actual locations of potential exploration wells and field development are unknown. The impacts associated with these activities could occur anywhere within the leased parcels that are of high, moderate, or even low potential for oil and gas resources.

The RMP/FEIS assumes a total of 448 wells would be drilled, including small and large field developments and associated abandoned well pads, resulting in total short-term disturbance of approximately 8,400 acres and a long-term (greater than 10 years for producing wells) disturbance of approximately 1,400 acres. Short-term disturbance, as defined for the RFFD scenario, identifies wells to be plugged and abandoned that would be reclaimed immediately after drilling or construction, in accordance with COAs and BMPs. If 448 wells should occur over 20 years, then an average of 22 wells totaling 81 acres of short-term surface disturbance and 33 acres of long-term surface disturbance can be expected per year under the RFFD scenario. Therefore, it is expected that 132 wells should have been drilled since the RMP.

There have been 19 APDs approved by the Ely District over the past 10 years and only 16 have been approved since the ELY RMP was approved in August 2008. Most APD's in the Ely District propose a single well per pad. Additionally, not every APD approved is actually drilled. Therefore, it would be highly speculative that 438 wells would be drilled over the next 9 years, even with advancements in well stimulation techniques.

2.4.3. Exploration Drilling

The RFFD scenario in the Ely District RMP/FEIS (2007) planned for 200 exploration wells over the life of the RMP that could result in 740 acres of short-term surface disturbance. This exploration well estimate does not include numbers for small and large field development or abandoned well pads. Under the RMP scenario, approximately 1,000 miles of new roads would be created to access the well pads. This would add another 4,800 acres of short-term surface disturbance (BLM 2007, Table 4.18–2). If this development and associated disturbance is expected over the course of 20 years, then average development and disturbance per year is expected to include 10 exploration wells and 50 miles of new roads resulting in 37 acres and 240 acres of short term surface disturbance respectively.

Typically, constructing the roads and pads, and drilling the well should take less than six months to complete. If the well is a dry hole, then it is plugged immediately before the drill rig leaves the site. Reclamation of the pad and access road takes place once conditions permit, typically within six months of abandoning the well. If the well becomes a producer, then the access road would remain until the well is no longer producing. The pad would be reclaimed to a smaller size necessary to accommodate production operations.

2.4.4. Production

The average geographic area for a producing oil and gas field in the United States is about 640 acres. Field sizes tend to be smaller in Nevada. There would be 40-acre spacing for wells less than 5,000 feet in depth and 160-acre spacing for wells deeper than 5,000 feet. Most wells drilled in Nevada are deeper than 5,000 feet, so well spacing would probably be 160 acres.

The RFFD scenario in the RMP/FEIS planned for six new production well fields within the Ely District; four small fields and two large fields. The four small well fields would be comprised of 88 wells, 40 being producing wells and the other 48 being plugged and abandoned. The two large well fields would be

comprised of 160 wells, 100 being producing wells and the other 60 being plugged and abandoned. This RFFD also included a total of 56 miles of new access and service roads, and eight miles of new pipelines for the small well fields. The two large well fields would include an overall total of 55 miles of new access and service roads, and 10 miles of new pipelines. A projection of adding a new refinery to the area was also included in this RFFD (BLM 2007, Table 4.18–2).

Well fields can take a number of years to develop and occupy various acreages. Therefore it cannot be broken down into an average number of well field development per year. Furthermore, the Ely District only has one well field (located in Railroad Valley with only 2 producing wells). It is possible however, that some of the individual parcels nominated, individually or as adjacent leases, could support well field development.

2.4.5. Well Stimulation

Well stimulation may be used to enhance oil recovery of developed wells. Several methods of well stimulation could be used to increase the yield of a well. Hydraulic fracturing is the process of applying high pressure fluids to a subsurface formation via a wellbore, to the extent that the pressure induces fractures in the rock. These fractures allow the oil and gas to migrate, or flow, into the well. Without the fracturing of the formation, the oil and gas contained in the rock would be too tightly trapped to flow into the well. Development of hydraulic fracturing methods and the drilling technology in which it is applied (in particular, long wells drilled horizontally within zones of interest) have enabled production of oil and gas from tight formations formerly not economically feasible.

In order to mitigate potential environmental impacts from hydraulic fracturing methods, the following list of mitigation measures would be required. Additional analysis would be conducted when an APD is submitted to determine the site-specific issues, the need for additional BMPs and COAs, and if hydraulic fracturing can be conducted without causing undue and unnecessary degradation per 43 CFR 3100. Wells are cased multiple times and sealed with cement between the wellbore and the formation. Well integrity is tested throughout the process.

Drilling and hydraulic fracturing fluids would either be contained in a pit-less system (above ground tanks) or a lined pit. Cuttings could be contained in roll-off boxes for hauling to disposal or surface casing interval cuttings could be spread over the site during reclamation.

Hydraulic fracturing fluids may be returned to the surface as “flowback” or produced water when the well is tested or produced. All recovered fluids are generally handled by one of four methods: (1) underground injection; (2) captured in steel tanks and disposed of in an approved disposal facility; (3) treatment and reuse; or (4) surface disposal pits.

A detailed discussion of hydraulic fracturing is found in Appendix F.

Chapter 3. Affected Environment and Environmental Effects

3.1. Introduction

This chapter presents the existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area, the issues analyzed, the impacts to the analyzed resources, and mitigation that could be applied that would reduce those impacts. Mitigation proposed in this section could be included in the FONSI to prevent potentially significant impacts. Application of the mitigation measures to the proposed action would then be carried forward into the Decision Record as a condition of approval of the proposal.

While many potential issues may arise during scoping, not all of them warrant analysis. Issues raised through scoping are analyzed if:

Analysis of the issue is necessary to make a reasoned choice between alternatives.

The issue is significant (e.g. an issue associated with a significant impact, such as a potential violation of a law imposed to protect the environment).

Analysis of the issue is necessary to determine if the direct or indirect impacts are themselves significant, or if it would add a measurable incremental impact to past, present and reasonably foreseeable actions that could have a cumulatively significant impact.

Potential impacts to the following resources/concerns were evaluated in accordance with criteria listed above to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Many times a project would have some degree of effect upon a resource or concern, but that effect doesn't approach any threshold of significance, nor does it increase cumulative impacts by a measurable increment. Such effects are described as "negligible" in the rationale for dismissal from analysis.

The following table documents the issues evaluation or rationale for dismissal from analysis:

Table 3.1 Resources Concerned

Resources	Not Present	Present/Not Affected	Present/May be Affected	Rationale
Air quality and climate change			√	See Sections 3.3.1 and 4.2.1
Special Designation Management: ACEC, National Monument, Wild and Scenic Rivers	√			The proposed lease parcels are not located in or near any areas of special management designation, ACEC, National Monument, or Wild and Scenic Rivers
Cultural resources			√	See Section 3.3.2
Environmental justice and socioeconomic values		√		A low-income population is present, but is not expected to be disproportionately affected.
Soil Resources: Prime and Unique Farmlands	√			There are no Prime or Unique Farmlands, as defined by the Farmland Protection Policy Act, in the project area.

Noxious weeds and invasive, non-native species			√	See Sections 3.3.14 and 4.2.11
Native American cultural concerns		√		The BLM Ely District Office, Bristlecone Field Office, reached out to federally recognized tribes, in compliance with Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, by sending consultation letters seeking input on June 6, 2018. No potential issues with the Proposed Action have been brought forward at this time.
Floodplains			√	See Sections 3.3.3 and 4.2.2
Riparian/wetlands			√	See Sections 3.3.6 and 4.2.5; see 3.3.8 and 4.2.7 for riparian/wetland wildlife habitat
Threatened or endangered species			√	See Sections 3.3.4 and 4.2.2
Migratory birds			√	See Sections 3.3.13 and 4.2.7
Waste, hazardous/solid			√	See Sections 3.2.18 and 4.2.10
Water quality, Surface and Ground			√	See Sections 3.3.5 and 4.2.4
Wilderness and Wilderness Study Areas (WSAs)	√			None of the proposed parcels are within a designated Wilderness or WSA.
Lands with Wilderness Characteristics			√	See sections 3.3.7 and 4.2.6. A wilderness characteristics inventory is in progress. In the interim, lands with wilderness characteristics will be managed for multiple use where not designated otherwise, as stated in 2008 RMP.
Human Health and Safety	√			Human health and safety would not be affected by the proposed actions because no activity is authorized at this time. Additional NEPA would be required if development is proposed.

Table 3.1 Other resources considered in the EA.

Other Resources	Not Present	Present/Not Affected	Present/May be Affected	Rationale
Fire management		√		Standard fire management stipulations would be included in any lease sale. Any potential impacts from subsequent exploration and development activities would be analyzed under a separate, additional site specific analysis.
Forests/Woodland Products and Rangelands (Healthy Forest Restoration Act Only)	√			Resources not present in the project area.

Geology and minerals			√	See Sections 3.3.12 and 4.2.9
Land and Realty		√		Many of the proposed lease parcels include pre-existing land use authorizations such as grants, leases, and permits. Any potential impacts to pre-existing land use authorizations from subsequent exploration and development activities would be analyzed under a separate, additional site specific analysis.
Paleontological resources		√	√	The Paleontological resources lease notice would be included in any lease sale. Any potential impacts from subsequent exploration and development activities would be analyzed on a separate, additional site specific analysis.
Recreation		√		Leasing would not restrict access to recreation resources or activities. Detailed NEPA analysis would occur if development were to occur on leased parcels.

3.2. General Setting

There are no known oil reserves within any of the proposed parcel areas. The oil-bearing formations sought in White Pine and Nye Counties are primarily the Chainman and Pilot shales. Devonian-age subthrust structures, thought to be present in some valleys within the analysis area, are also targeted. The nominated parcels have been separated into 5 groups by geographic area and similar resource concerns (see Chapter 2 Tables and map). The total area of all the parcels is approximately 426,531 acres. All 202 parcels are located within the Bristlecone Field Office boundary.

Group 1 is located entirely within northeast White Pine County. Nominated parcels are located in Antelope Valley and the Antelope and Kern Mountain Ranges. This group contains 39 parcels totaling 92,018.280 acres. These parcels are west of the Goshute Indian Reservation.

Group 2 is located entirely in northcentral White Pine County. Nominated parcels are located in the northern portion of Steptoe Valley, the Cherry Creek Range and the Cocomongo Mountains. This group contains 38 parcels totaling 72,691.610 acres.

Group 3 is located entirely in northwest White Pine County. Nominated parcels are located in Newark and Long Valleys and the Maverick Springs Range. This group contains 84 parcels totaling 178,447.142 acres. This group is located directly south of the Ruby Lake National Wildlife Refuge.

Group 4 is located entirely in central White Pine County. Nominated parcels are located in Jakes Valley. This group contains 26 parcels totaling 52,441.400 acres.

Group 5 is located entirely within Nye County except for a small portion of parcel 211 which is in southeastern White Pine County. Nominated parcels are located in Railroad and Big Sand Springs Valleys and the Pancake Range. This group has 15 parcels totaling 30,752.600 acres. These parcels are east and southwest of the Duckwater Reservation.

3.3. Resources

The following sections evaluate resources for the potential for significant impacts to occur, either directly or indirectly, due to implementation of the proposed action. Potential impacts were evaluated to determine if detailed analyses were required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all federal actions. Other items are relevant to the management of public lands in general, and to the Ely District in particular. Table 3.1 lists any resources and rationale for not being carried forward for analysis as well as those that are carried forward.

At the time of this review, it is not known whether all nominated parcels would be offered for lease, would receive bids, would be issued leases, or what type of exploration or development would be proposed in the future. Detailed site-specific analysis of individual pads, wells, or roads would occur when an APD is submitted.

3.3.1. Air Quality and Climate Change

Much of the information for the 2018 EA in this section is incorporated by reference from the 2017 U.S. Department Interior Bureau of Land Management Competitive Oil and Gas Lease Sale Final Environmental Assessment (EA), Section 3.3.1 Air Quality and Climate Change, pages 25 through 31 (BLM, 2018). The 2017 section as referenced describes potential adverse atmospheric and related potential health effects due to air quality impacts from oil and gas development, and describes how the generation of greenhouse gases from oil and gas development can contribute to climate change. The physiography of the parcels analyzed in the 2017 EA is similar to those currently under analysis within this EA. As such, the impacts to air quality and climate change from future oil and gas development as described in the 2017 EA will be the same for any future development that may take place on the lease parcels currently under analysis within the 2018 EA.

Affected Environment

The U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) for criteria pollutants, including carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). In addition to the criteria pollutants, regulations also exist to control the release of hazardous air pollutants (HAPs), some of which can be emitted from oil and gas development operations, such as benzene, toluene, and formaldehyde. Ambient air quality standards for HAPs do not exist; rather these emissions are regulated by the source type, or specific industrial sector responsible for the emissions.

The EPA has delegated regulation of air quality under the federal Clean Air Act to the State of Nevada. Ambient air quality in the affected environment is demonstrated by monitoring for ground-level atmospheric air pollutant concentrations. The ambient air measurements show that the existing regional air quality is in attainment, meaning that concentrations for all the criteria pollutants are below the applicable state and federal ambient air quality standards. For more information on pollutant monitoring values, please visit the EPA's AirData website at www.epa.gov/airdata.

Environmental Effects

Proposed Action

While the act of leasing the parcels would produce no substantial air quality effects, potential future development of the leases could lead to increases in local and regional emissions. Since it is unknown if the parcels would be developed, or the extent of the development, it is not possible to reasonably quantify potential air quality effects through dispersion modeling or another applicable method at this time. Further, the timing, construction and production equipment specifications and configurations, and specific locations of activities are also unforeseeable at this time.

Effects to air quality from lease development include potential increases in fugitive dust and potentially inhalable particulate matter (specifically PM₁₀ and PM_{2.5}) in the project area and immediate vicinity. Particulate matter may become airborne when drill rigs and other vehicles travel on dirt roads to drilling locations. Air quality may also be affected by exhaust emissions from engines used for drilling, transportation, gas processing, compression for transport in pipelines, and other uses. These sources would contribute to potential short and long term increases in the criteria pollutants and HAPs. Other pollutants such as carbon dioxide, methane and nitrous oxide could also be emitted.

The air effects described above would be addressed in a subsequent analysis when lessees file an Application for Permit to Drill (APD). All proposed activities including, but not limited to, exploratory drilling activities would be subject to applicable local, state, tribal and federal air quality laws and regulations.

No Action Alternative

The No Action Alternative would have no impacts on the existing air quality in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

3.3.2. Cultural Resources

Cultural resources include, but are not limited to rock art, Paleo-Indian and other prehistoric habitation sites, utilized rock shelters and caves, historic cemeteries, mines, town sites and dwellings.

Affected Environment

Any program, activity, or project has an effect on a cultural resource if it alters any of the characteristics or criteria that may qualify the resource for inclusion on the National Register of Historic Places (NRHP) or otherwise affects a cultural property's legally protected status. Impacts to cultural properties are considered adverse if the effect diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Negative or adverse effects can include, but are not limited to: physical destruction of, or damage to, all or part of a property; alteration of a property (e.g., restoration, rehabilitation, stabilization); removal of a property from its historic location; or, transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation (Ely RMP).

The cultural landscape on the Ely District provides evidence of a long history of human occupation. The earliest commonly accepted time frame for prehistoric human presence in Nevada is approximately 10,000 to 11,000 years before present. The region has been consistently, though not densely, populated up to the present day. The prehistoric and historic cultural landscape encompasses artifacts, features, sites, and districts. These evidence classes relate to prehistoric subsistence, lifeways, cultural affiliation, and historic settlement of Nevada that includes mining, ranching, and agriculture. Historic Trails are of concern for some parcels. The Lincoln Highway runs through Group 1 and within one mile of Groups 2 and 4. Pony Express NSHT runs through Groups 1, 2, and 3. The California NSHT (Hastings Cutoff) runs through Group 3. The southern parcels of Group 3 may be in visual range of the Sunshine Locality. The southern parcels of Group 4 are adjacent to the Honeymoon Hill ACEC.

Environmental Effects

The lease of oil and gas parcels does not entail ground disturbing activities as part of the undertaking. Therefore, this undertaking would not result in impacts to cultural resources. All ground disturbing actions associated with the development of a lease after it has been sold would require additional NEPA and NHPA section 106 compliant Class III survey analysis. Lease Notices and Stipulations are found in Appendix C. Notices are included with all parcels and Stipulations are also included with parcels that have known NRHP eligible cultural resource sites. As required by law, prior to any development, cultural

resources would be evaluated in future NEPA analysis and adverse effects would be mitigated prior to ground disturbance for those resources eligible for listing on the NRHP. The lease of oil and gas parcels does not entail ground disturbing activities as part of the undertaking. Therefore, this undertaking would not result in impacts to Heritage Special Designated areas.

Oil and gas exploration and development activities within one mile of the Lincoln Highway, Pony Express, California Trail, Sunshine Locality, and Honeymoon Hill ACEC would undergo a visual assessment in conjunction with additional NEPA review at the APD stage to determine if the activity would adversely affect the visual integrity of these sites. Mitigation would take place as necessary to maintain the management corridor in as natural a condition as possible.

Proposed Action

Most Lease Sale parcels have not been thoroughly ground surveyed. Those parcels that have been surveyed would require an updated survey. It should be expected that undocumented additional NRHP eligible sites would be discovered when the surveys are completed. All Lease Sale parcels would come with a Notice of possible National NRHP eligible sites present and mandate an individual EA, including NHPA Section 106 compliant Class III survey analysis, before any ground disturbance.

No Action Alternative

The No Action Alternative would not impact cultural resources or Heritage Special Designated areas.

3.3.3. Floodplains

Affected Environment

For administrative purposes, the 100-year floodplain serves as the basis for floodplain management on public lands. The Federal Emergency Management Agency (FEMA) designates areas with a 1% chance to be flooded during a 100-year, 24-hour runoff event as Zone A and Zone AE flood hazard areas. Areas identified within Zone A or AE flood hazard areas would be subject to federal regulation and mitigation. However, FEMA flood mapping data is not yet available for most of White Pine County to indicate such designations. FEMA gives a Zone D classification to areas such as these where there are possible but undetermined flood hazards, because no analysis of flood hazards has been conducted. Another designation FEMA uses is Zone X, which applies to areas that lie within a zone having a 0.2 percent annual flood hazard rating, but where no base flood evaluations or depths are shown.

Parcel groups 1 through 4 in White Pine County, and the northern portion of parcel NV-18-12-211 (group 5) that lies in White Pine County, are on land classified as Zone D. Flood insurance for Zone D areas is available but is commensurate with the flood risk uncertainty. The remainder of the group 5 parcels lie in Nye County and carry the Zone X designation.

Environmental Effects

Proposed Action

While the act of leasing the parcels would produce no ground-disturbing effects within floodplain areas, activities related to lease parcel development can impact the soils of floodplains, making them more susceptible to erosion during flood events or slowing floodwater infiltration through soil compaction. Oil and gas lease stipulation #NV-L-10-C-NSO in Appendix A.2 of the Ely RMP/FEIS, as amended in 2015, prohibits any surface occupancy for oil and gas on 100-year flood plains of major rivers that have a one percent chance of flooding in any given year. Site-specific analysis to identify potential flood plain impacts would be required for any parcels that could be located in Zones A or AE, or in unmapped areas prior to drilling in parcels that meet this designation.

No Action Alternative

The No Action Alternative would have no impacts on floodplains in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

3.3.4. Threatened and Endangered Species

Affected Environment

The Railroad Valley springfish was listed as a federally threatened species on March 31, 1986 under the Endangered Species Act. Based on data provided by NDOW, it is located only in two areas in Nevada, Lockes Ranch (private) and the Duckwater Shoshone Reservation (tribal), both of which are located in Railroad Valley near Group 5 parcels. The Reinitiation of BLM Ely District's Programmatic Biological Opinion (USFWS 2017) covers the life history, population trends, and recovery actions of the Railroad Valley springfish (pgs. 45-50).

Environmental Effects

Proposed Action

In December of 2017, the BLM reinitiated Section 7 Consultation with the US Fish and Wildlife Service on the BLM Ely District's Programmatic Biological Opinion (File no. 84320-2008-F-0078). It was determined in the Biological Opinion that geology and mineral extraction, which includes oil and gas exploration, *may affect, likely to adversely affect* the Railroad Valley springfish and adverse effects to critical habitat is anticipated. The Biological Opinion states "...some actions that will not be subject to further section 7 consultation (mixed programmatic actions), such as non-surface disturbance exploration involved in the lease notice stage of fluid leasable extraction (after BLM approval), and also approves a framework for the development of future actions that are authorized, funded, or carried out at a later time, and any take of a listed species would not occur unless and until those future actions are authorized, funded, or carried out and subject to further section 7 consultation (i.e., framework programmatic actions)." Therefore, when an APD is received, Section 7 consultation would be initiated with the USFWS and it would be determined at this time if exploration would or would not result in a may affect, likely to adversely affect the Railroad Valley springfish.

There would be no direct effects to the Railroad Valley springfish from issuing new oil and gas leases because leasing does not directly authorize oil and gas exploration and development activities. Additionally, the Railroad Valley springfish is located on non-federal lands (Tribal, state, and private) and would not undergo surface disturbance from oil and gas development. However, if oil and gas exploration were to occur in or within the same hydrobasin as the group 5 parcels, there may be indirect affects to species from upland erosion, increased turbidity, sedimentation, or degraded water quality or contamination. There may also be indirect effects including degradation of water quality from groundwater use for drilling and hydraulic fracturing operations and contamination of alluvial aquifer from wellbore casing leakage. The effects of oil and gas development to listed fish species and habitat are fully discussed on pages 107-109 of the Biological Opinion. As stated above, Section 7 consultation would be initiated when an APD is received.

No Action Alternative

Under the No Action Alternative, the lease sale would not occur and no impacts to threatened or endangered species would occur.

3.3.5. Water Quality, Surface and Ground

Affected Environment

Water Quality

Water Quality in Nevada is monitored by the Nevada Division of Environmental Protection (NDEP). NDEP has established water monitoring control points at selected locations throughout the hydrographic

regions of Nevada. At these control points NDEP specifies the Nevada Water Quality Standards and makes them available in Nevada Revised Statute NRS 445A.1242. These standards apply to all surface water in the watershed upstream from the control point. NDEP also oversees groundwater quality by laying out standards that must be met for remediation of groundwater contamination.

The Ely RMP requires that authorized activities on public lands do not degrade water quality. This includes compliance with the federal Clean Water Act and Nevada Water Pollution Control Regulations (Nevada Revised Statute 445A). RMP objective WR-2 also requires the integration of land health standards, best management practices, and appropriate mitigation measures into authorized activities to ensure water quality meets Nevada requirements and meets the BLM resource management objectives laid out in BLM Manual 7240. Additionally, any water used for exploration or production of oil and gas resources would need comply with BLM Manual 7250 and Nevada Water Law to ensure that the use does not to impact other water right holders.

Groundwater Resources

Groundwater in Nevada comes from water stored in aquifers composed of alluvium, carbonate, and volcanic rock units. The carbonate bedrock aquifers are part of a deep, widespread aquifer system known as the Basin and Range carbonate-rock aquifer system (Welch et al., 2007). Though the carbonate aquifers can have a high capacity to transmit water, they are not widely used as a groundwater resource owing to the fact that, with a few exceptions, they are too deep for reasonable access in most places. Thus, the majority of groundwater use comes from wells drilled into the alluvium aquifers, which are relatively shallow and composed of unconsolidated sediments eroded from elevated rock exposed in the mountain ranges and transported into the valleys by water and gravity. These aquifers also readily transmit water, exist in all of Nevada's drainage basins, and collectively make up what is called the Great Basin alluvial aquifer system (Heilweil and Brooks, 2011). Volcanic rocks underlying the basin fill sediments are not as widespread and tend not to yield the groundwater volumes that the carbonate and alluvium aquifers produce (Welch, et al., 2007).

The hydrographic basin is the basic management unit used by the Nevada Division of Water Resources (NDWR). Hydrographic basins are part of larger hydrographic flow regions. Table 3.2 identifies the hydrographic basin numbers, basin names, and hydrographic flow regions in which the lease parcels are located, along with groundwater demands and estimated perennial yield in the analysis area (NDWR, 2018).

Table 3.2 Hydrographic Basin Summary

Basin #	Basin Name	Hydrographic Region	Designated Basin (Y/N)^a	Perennial Yield (Acre-Feet/Year)	Groundwater Appropriations (Acre-Feet/Year)
47	Huntington Valley	Humboldt River Basin	Y (Order No. 865)	14,000	13,399
154	Newark Valley	Central	N	18,000	27,656
155C	Little Smoky Valley, Southern Part	Central	N	1,000	39
173B	Railroad Valley, Northern Part	Central	N	75,000	31,770
174	Jakes Valley	Central	N	12,000	29
175	Long Valley	Central	N	6,000	5,078
176	Ruby Valley	Central	Y (Order No. 871)	37,000	30,400

178B	Butte Valley, Southern Part	Central	N	14,000	365
179	Steptoe Valley	Central	Y (Order No. 731)	70,000	179,952
184	Spring Valley	Central	N	84,000	20,691
185	Tippet Valley	Central	N	3,500	475
207	White River Valley	Colorado River Basin	Y (Order No. 1219)	37,000	35,432

Designated groundwater basins are basins that the Nevada State Engineer declares as designated by order because permitted groundwater rights approach or exceed the average annual recharge, and where the water resources are being depleted or require additional administration. State-declared preferred uses may include, among others, municipal, domestic, and agriculture. The NSE has additional authority to administer water resources in a designated groundwater basin.

Water rights in Nevada are administered by the Nevada State Engineer (NSE). Many of these hydrographic basins are designated basins, indicating that the NSE would closely monitor future groundwater use and may not issue new groundwater permits. The proposed lease parcels are located in the Central, the Humboldt River Basin, and the Colorado River Basin hydrographic regions. Table 3.3 provides a summary of the 2018 proposed lease area.

Table 3.3 Hydrographic Basins in which the 2018 Nominated Parcels are Located

Parcel Group	Basin Name(s)
1	179, 184 and 185
2	178B and 179
3	47, 154, 175, and 176
4	174 and 207
5	173B and 155C

Surface Water Resources

Surface water resources in the analysis area include perennial, intermittent, and ephemeral streams, marshlands and small lakes, periodically inundated playas, springs, and constructed impoundments. Most streams in the analysis area are ephemeral and flow from the mountains during precipitation and snowmelt events and seep into the basin alluvium or are diverted for irrigation. Parcels located along the east margin of group 2 have perennial water of the Steptoe Valley system flowing through them, and parcels located at the northern end of group 3 are located near perennial water adjacent to the Ruby Valley National Wildlife Refuge.

Environmental Effects

Proposed Action

Water Quality

The lease of parcels and issuance of oil and gas permits is strictly an administrative action. The act of offering, selling, and issuing federal oil and gas leases does not produce impacts to water quality. Potential on-the-ground impacts would not occur until a lessee applies for and receives approval of their APD on the lease. Prior to APD approval, site-specific NEPA analysis is required to analyze potential impacts to water quality. Additionally, water for any development activity would either come from private sources or would have to have water rights permitted by the NSE.

Groundwater Resources

Impacts to groundwater resources that could occur following an APD approval include introduction of drilling fluids into groundwater, contamination of groundwater from petroleum and other chemicals through spills, well casing leaks, and pipeline leaks, and loss of hydraulic fracturing (HF) fluids into groundwater during HF operations. Similarly, improper construction and management of reserve and evaporation pits can impact ground water quality through leakage and leaching. To safeguard against these kinds groundwater impacts, authorization of the proposed projects would require compliance with local, state, and federal directives, regulations, permitting, and stipulations that relate to groundwater protection, as well as federal and State of Nevada guidelines for hydraulic fracturing. Site-specific NEPA analysis of the potential for groundwater impacts would be conducted prior to any approval for an APD.

Surface Water Resources

Impacts to surface water resources that could occur following an APD approval include alterations to the hydrologic regime such as increased salt and sediment loads during runoff events, increased erosion during construction phases, and alteration of overland flow patterns and groundwater recharge rates from clearing, grading, and soil stockpiling activities. Chemicals on the surface associated with development projects could be delivered along with sediments into natural drainage channels and delivered downstream.

Implementation of Best Management Practices along with compliance with state and federally-imposed sedimentation and runoff control measures would be required to effectively prevent project-related transport and delivery of sediments or fluids that may impair surface water resources. Site-specific NEPA analysis of the potential for surface water impacts would be conducted prior to any approval for an APD.

No Action Alternative

The No Action Alternative would have no impacts on water quality and surface and groundwater in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

3.3.6. Wetlands/Riparian Zones

Affected Environment

Riparian wetland sites in the region are the result of standing water, or lentic systems, in the form of bogs, ponds and small lakes; or lotic systems, which refers to moving water running in perennial rivers and streams. (BLM 2007). Most lotic and lentic systems in the region originate from groundwater supplied by springs, including some of the larger spring-fed riparian systems that are supported by warm groundwater originating from the Basin and Range carbonate aquifer system.

With the exception of the group 2 parcels, riparian and wetland areas represent a small percentage of the land in and around the lease parcel areas, but contain the majority of biodiversity and provide vital ecologic functions. Parcels along the east margin of group 2 coincide with approximately 15 miles of a wetlands system in Steptoe Valley that the U.S. Fish and Wildlife Service describes as freshwater forested/shrub wetlands, freshwater lakes, freshwater emergent wetlands, and freshwater ponds (FWS, 2018).

Environmental Effects

Proposed Action

Impacts to riparian areas from development of the parcels following an APD approval could include direct impacts due to increased surface runoff from a site. This could cause increased sedimentation and possibly contamination of a riparian area if there are contaminants in the runoff. Indirect impacts to riparian areas may include water table drawdown related to groundwater pumping and contamination of riparian areas from chemical-impacted aquifer sources.

Implementation of Best Management Practices along with compliance with state and federally-imposed sedimentation and runoff control measures would be required to effectively prevent project-related transport and delivery of sediments or fluids into riparian areas. APD approval would be contingent on requirements that lessees follow state and BLM requirements for well development and monitoring to reduce potential for impacts. Site-specific NEPA analysis of the potential for impacts to riparian areas would be conducted prior to any approval for an APD.

No Action Alternative

The No Action Alternative would have no impacts to riparian zones in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

3.3.7. Lands with Wilderness Characteristics

Affected Environment

On June 1, 2011, the Secretary of the Department of the Interior issued a memorandum to the BLM Director that in part affirms BLM's obligations relating to wilderness characteristics under Sections 201 and 202 of the Federal Land Management Policy Act. The BLM released Manuals 6310 and 6320 in March 2012, which provide direction on how to conduct and maintain wilderness characteristics inventories and provides guidance on how to consider whether to update a wilderness characteristics inventory.

The primary function of an inventory is to determine the presence or absence of wilderness characteristics. An area having wilderness characteristics is defined by:

- Size - at least 5,000 acres of contiguous, road-less federal land,
- Naturalness, and
- Outstanding opportunities for solitude or primitive and unconfined types of recreation.
- The area may also contain supplemental values (ecological, geological, or other features of scientific, educational, scenic, or historical values).

The Nevada BLM published the original draft wilderness review in 1979, and issued the intensive wilderness inventory decision in 1980. In 2011, the Ely District Office BLM began updating the lands with wilderness characteristics (LWC) inventory on a project-by-project basis until there is a land use plan revision. There has not been a land use plan amendment to determine if or how these LWC units would be preserved to protect the wilderness characteristics. Until this occurs the EYDO is managing LWC under Manual 6320-Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (Public). This manual contains the BLM's policy and guidance for considering lands with wilderness characteristics in the BLM land use planning process under FLPMA and other applicable law and supersedes all previous guidance on this topic.

The project area has received an inventory update. Of the 202 proposed oil and gas lease parcels, 30 parcels overlap 8 LWC inventory units which were found to possess wilderness characteristics (see Table 3.4). Of this, three of the inventory units were found to possess wilderness characteristics on their own merits and the other five units were contiguous and therefore inherited the outstanding opportunities of adjacent wilderness areas.

There has not been a land use plan amendment to determine if or how these LWC units would be managed to protect the wilderness characteristics. The following 8 LWC units total 120,133 acres. These units lie within parcel groups 1-5 (see Maps A6 in Appendix A).

Table 3.4 Lands with Wilderness Characteristics within Nominated Parcels

Unit Unique Identifier Parcel Group 1	Sufficient Size? Yes/No (acres)	Natural - ness? Yes/No	Outstanding Solitude? Yes/No	Outstanding Primitive & Unconfined Recreation? Yes/No	Supple- mental Values? Yes/No	Updated Determi - nation	Overlapping Parcel(s)	Acres of Parcel Over- lapping LWC Unit
078	Yes 13,582	Yes	No	Yes	Yes Blue Mass Scenic Area	Yes	NV-18-12-191 NV-18-12-194 NV-18-12-195 NV-18-12-197 NV-18-12-198	193 211 846 790 382
004-1-2011	Yes 22,358	Yes	Yes	Yes	Yes Archeologi cal/ Cultural	Yes	NV-18-12-182 NV-18-12-183 NV-18-12-184 NV-18-12-185 NV-18-12-186 NV-18-12-187 NV-18-12-188 NV-18-12-189 NV-18-12-190	2,511 679 2,560 2,354 1,305 2,166 1,927 918 560
Unit Unique Identifier Parcel Group 2	Sufficient Size? Yes/No (acres)	Natural - ness? Yes/No	Outstanding Solitude? Yes/No	Outstanding Primitive & Unconfined Recreation Yes/No	Supple- mental Values? Yes/No	Updated Determi - nation	Overlapping Parcel(s)	Acres of Parcel Over- lapping LWC Unit
015A-2A- 2012	Yes 8,003	Yes	Yes	Yes	No	Yes	NV-18-12-133 NV-18-12-160	1,935 50
Unit Unique Identifier Parcel Group 3	Sufficient Size? Yes/No (acres)	Natural - ness? Yes/No	Outstanding Solitude? Yes/No	Outstanding Primitive & Unconfined Recreation? Yes/No	Supple- mental Values? Yes/No	Updated Determi - nation	Overlapping Parcel(s)	Acres of Parcel Over- lapping LWC Unit
034-2012	Yes 39,408	Yes	Yes	Yes	Yes Geologic/ scenic	Yes*	NV-18-12-014 NV-18-12-016 NV-18-12-017 NV-18-12-020	131 1,733 509 941
Unit Unique Identifier Parcel Group 4	Sufficient Size? Yes/No (acres)	Natural - ness? Yes/No	Outstanding Solitude? Yes/No	Outstanding Primitive & Unconfined Recreation? Yes/No	Supple- mental Values? Yes/No	Updated Determi - nation	Overlapping Parcel(s)	Acres of Parcel Over- lapping LWC Unit

131E	Yes, contiguous 1,530	Yes	Yes	Yes	No	Yes*	NV-18-12-091 NV-18-12-092	515 545
131F	Yes, contiguous 4,728	Yes	Yes	Yes	No	Yes*	NV-18-12-091 NV-18-12-092 NV-18-12-093 NV-18-12-094	15 780 1,740 971
Unit Unique Identifier Parcel Group 5	Sufficient Size?	Natural - ness?	Outstanding Solitude?	Outstanding Primitive & Unconfined Recreation?	Supple- mental Values?	Updated Determi - nation	Overlapping Parcel(s)	Acre of Parcel Over- lapping LWC Unit
	Yes/No (acres)	Yes/No	Yes/No	Yes/No	Yes/No			
148-1	Yes 12,038	Yes	Yes	Yes	No	Yes*	NV-18-12-211	229
148-2	Yes 18,486	Yes	Yes	Yes	No	Yes*	NV-17-12-207 NV-17-12-208 NV-18-12-211	1,183 815 1,920

* This unit possesses wilderness characteristics based on the adjacent designated wilderness.

Environmental Effects

Proposed Action

The proposed action to authorize oil and gas leasing would potentially impact wilderness characteristics in the 8 inventory units when and if exploration and production activities occur. Short-term (5-10 years) disturbances may impair the wilderness character of the inventory units by reducing and possibly eliminating wilderness characteristics. Depending on the location and density of exploration wells, the inventory units may be reduced to areas of less than 5,000 acres; naturalness could be eliminated across the developed portions of the units; and opportunities for solitude or a primitive and unconfined type of recreation may be eliminated throughout the unit.

If exploration wells are plugged and abandoned, they would be reclaimed immediately after drilling or construction. Therefore, in the long term, it is possible that all disturbances would be reclaimed allowing the area to return to a natural state; and opportunities for solitude or a primitive and unconfined type of recreation would return. Impacts to size may also be reclaimed after exploration, but depending on the extent of wells and associated facilities (roads, gravel pits, etc.) impacts may remain should any of the supporting facilities continue to be used that could continue to eliminate wilderness characteristics based on size. For any producing wells, the impacts would be long term (20 years) or much longer. At that point, the impacts to LWC would be considered permanent.

There has not been a land use plan amendment to determine if or how these LWC units would be managed to protect the wilderness characteristics. If the Ely District, upon update of the RMP decides to manage for LWC these permanently impacted areas may be cherry stemmed, or removed from the LWC unit. Impacts to LWC in portions of the unit do not necessarily remove the entire unit from being managed for LWC.

The anticipated disturbance of the acreage overlapping LWC equals approximately 31 acres.

No Action Alternative

Under the No Action Alternative, all expressions of interest to lease would be denied or rejected. Therefore, there would be no human-caused alterations to the existing landscape from this project and there would be no impacts to the wilderness characteristics.

3.3.8. Fish and Wildlife

Affected Environment

The oil and gas parcels are expected to provide habitat for numerous wildlife species. Common big game species that inhabit the proposed lease areas include pronghorn antelope, Rocky Mountain elk, and mule deer. Table 3.5 below lists approximate acreages of critical big game habitat that have special timing stipulations as required by the Ely RMP. Maps A8-A13 in Appendix A show the habitats listed in Table 3.6. Some other wildlife species that inhabit the lease areas include mountain lions, bobcats, coyotes, jackrabbits, cottontails, badgers, and numerous birds, reptiles, and small mammals. Bird species protected by the Migratory Bird Treaty Act (MBTA) are found throughout habitat types in the Assessment Area. Riparian vegetation associated with perennial streams, seeps and springs is particularly important for a diverse migratory bird community. Playas, if consistently flooded during the breeding season, may provide breeding habitat; and even if only occasionally flooded, could provide feeding and stopover habitat for migrating shorebirds and waterfowl.

Table 3.5 Acreages of Big Game Habitat that Require Special Timing Stipulations

Habitat	Total Acres (approx.)	Group				
		1	2	3	4	5
Pronghorn antelope crucial winter	12,900	X				
Pronghorn antelope kidding	16,700			X		
Mule deer crucial winter	110,000	X	X	X		
Mule deer fawning	31,100	X	X			
Rocky Mountain elk calving	46,000	X	X			

Environmental Effects

Proposed Action

There would be no direct effects from issuing new oil and gas leases because leasing does not directly authorize oil and gas exploration and development activities. Direct impacts from these activities would be analyzed under a separate site-specific NEPA analysis. The RFFD scenario is the basis for indirect future or potential impacts that could occur once the parcels are leased. General short term and long term impacts of oil and gas to general wildlife species are discussed in the Ely RMP/EIS (2007) in Section 4.6 Fish and Wildlife on pages 4.6-14 – 4.6-15. Short term impacts analyzed in the Ely RMP include vegetation loss, habitat fragmentation, wildlife displacement, and increased noise and human presence. Long term impacts analyzed in the Ely RMP include irretrievable loss of habitat, change in vegetation composition, and habitat fragmentation and wildlife displacement.

Under the RFFD scenario, 9,807 acres (short and long-term disturbance) are anticipated to be disturbed, with the disturbance most likely dispersed throughout the nominated 426,351 acres. Given the level of disturbance would be approximately 2% of the total nominated acres, short-term and long-term impacts to overall habitat and species populations are anticipated to be negligible.

Impacts are not anticipated to negatively affect species populations and would be minimized with mitigation measures that, if warranted, would be applied during additional analysis. Protection of crucial winter habitat, as well as kidding, calving, and fawning grounds is important in protecting habitat that supports critical life stages for big game populations. Table 3.6 indicates that anticipated disturbance to important big game habitats, under the assumption that disturbance is spatially equal across all nominated parcels. Mitigation measures and timing stipulations would also be applied when an APD is received. BLM Nevada Standard Stipulations and Notices, attached to all parcels, alert prospective lessees that the parcel “may now or hereafter contain plants, animals, or their habitats determined to be threatened,

endangered, or other special status species” and summarizes steps that may be required to address them. The Standard Stipulations also outline requirements to protect migratory birds under the MBTA.

Table 3.6 Anticipated Acres of Disturbance in Important Big Game Habitats

Species	Habitat	Nominated Acres	RFFD Disturbance Acres		Habitat within Nominated Parcels (acres)	Anticipated Disturbance Acres	
			Short Term	Long Term		Short Term	Long Term
Pronghorn antelope	crucial winter	426,351	8,406 (2%)	1,401 (0.3%)	12,900	258	39
Mule deer	crucial winter				110,000	2,200	330
Pronghorn antelope	kidding				16,700	334	50
Rocky Mountain elk	calving				46,000	92	138
Mule deer	fawning				31,100	622	93

No Action Alternative

Under the No Action Alternative, the lease sale would not occur, and impacts to fish and wildlife would remain the same.

3.3.9. Special Status Species

Affected Environment

BLM Manual 6840 entitled Special Status Species Management states the BLM special status species are those that 1) are listed or proposed for listing as endangered or threatened under the Endangered Species Act (ESA), and 2) species requiring special management consideration to promote their conservation and reduce the likelihood and need for future listing under the ESA, which are designated as Bureau Sensitive by the State Director(s). Additionally, all federal candidate species, proposed species and delisted species in the five years following delisting would be conserved as Bureau sensitive species.

A GIS analysis was conducted using data from NDOW, BLM, US Fish and Wildlife Service, and the Nevada Natural Heritage Program to determine locations of special status species in relation to the leased parcels. Table B1 in Appendix B indicates which groups contain or are immediately adjacent to habitat for BLM special status species. Surveys may be required for special status species when an APD is submitted. Federally listed species was analyzed in Section 3.3.5 above.

On October 5, 2017 the Fish and Wildlife Service found that listing 14 species of Nevada springsnail species was not warranted. Of those 14, Duckwater pyrg, Southern Duckwater pyrg, Big Warm Springs pyrg, Duckwater Warm Spring pyrg are known to occur within or near nominated parcels of Group 5 and the Northern Steptoe pyrg within or near Group 2. Springsnails are restricted in distribution due to a limited range of physical and biological parameters that constitute suitable habitat. One known parameter is their dependency on perennial water.

Greater sage-grouse habitat comprises a portion of all parcel groups. Based on the Greater Sage-grouse Plan Amendment (2015), parcel groups contain Other (~60,280 acres), General (~91,820 acres) or Priority Habitat Management Areas (~121,650 acres; OHMA, GHMA, PHMA respectively), with Group 5 only consisting of OHMA. The proposed leased parcels contain important nesting and early brood-rearing (~204,320 acres), summer (~296,890 acres), and/or winter habitat (~296,890 acres) for Greater sage-grouse. Maps A11 – A14 in Appendix A display Greater sage-grouse Habitat Management Areas and the seasonal habitats in relation to the proposed lease parcels.

Environmental Effects

Proposed Action

Impacts would be similar to those described under the Fish and Wildlife Section (3.3.9) of this document such as habitat loss and/or degradation or displacement from noise and human presence. Because of the highly specialized and endemic nature of some special status species, additional mitigation may be needed at the exploration and development stages.

Notices and timing stipulations would minimize some effects to special status species. For example, the raptor nest site timing stipulation would minimize effects to Northern goshawk, golden eagle, western burrowing owl, ferruginous hawk, and peregrine falcon during the breeding season. Priority Habitat Management Areas for Greater sage-grouse is covered by a No Surface Occupancy stipulation. A 3% disturbance cap for PHMA would be calculated during the development phase if a lessee were to request an exception from the No Surface Occupancy stipulation. Additional mitigation measures for Greater sage-grouse would include the Adaptive Management Plan as provided in Appendix J of the Plan Amendment (BLM 2015).

Oil and gas exploration, and production activities, as outlined in the RFFD scenario, have the potential to affect sensitive vegetation by reduction or loss in production, distribution, and vigor of sensitive plant communities due to oil and gas activities. Additionally, ground disturbance and activities associated with oil and gas have the potential to introduce invasive plant species to communities that currently lack invasive plants.

Table 3.7 indicates that anticipated disturbance to Greater Sage-grouse habitat, under the assumption that disturbance is spatially equal across all nominated parcels. Direct and indirect impacts of oil and gas developments are analyzed in the Nevada and Northeastern California Greater Sage-Grouse Final Environmental Impact Statement (BLM & USDA Forest Service, 2015). These impacts include habitat loss, increased predation, increased invasive species, and noise disturbance. Mitigation measures and timing stipulations would also be applied when an APD is received.

Table 3.7 Anticipated Acres of Direct Disturbance in Greater Sage-grouse Habitat

Habitat	Nominated Acres	RFFD Disturbance Acres		Habitat within Nominated Parcels (acres)	Anticipated Disturbed Acres	
		Short Term	Long Term		Short Term	Long Term
PHMA*	426,351	0%	0%	121,651	0	0
GHMA		8,406 (2%)	1,401 (0.3%)	91,820	1,836	275
OHMA				60,281	1,205	181
Nesting				204,317	4,086	12
Brood rearing				296,887	5,937	891
Winter				197,820	3,956	593

*Open to fluid mineral leasing subject to no surface occupancy stipulation without waiver or modification and with limited exception.

No Action Alternative

Under the No Action Alternative, the lease sale would not occur, and no impacts to special status plant or animal species would occur.

3.3.10. Visual Resource Management

Affected Environment

The proposed parcels nominated for lease fall within Visual Resource Management (VRM) Classes designated in the Ely RMP (BLM 2008). BLM administered lands are placed into four visual resource

inventory classes: VRM Classes I, II, III, and IV. Class I and II are the most sensitive, Class III represents a moderate sensitivity and Class IV is of the least sensitivity (Table 3.8) VRM classes serve as a management tool that provides an objective for managing visual resources.

Table 3.8 VRM Classification Objectives

VRM Class	Visual Resource Objective	Change Allowed (relative level)	Relationship to the Casual Observer
Class I	Preserve the existing character of the landscape. Provide for natural ecological changes; however it does not preclude very limited management activity.	Very low	Activities must not attract attention.
Class II	Retain the existing character of the landscape. The level of change to the characteristic landscape should be low.	Low	Activities may be seen, but should not attract attention.
Class III	Partially retain the existing character of landscape. The level of change to the characteristic landscape should be moderate.	Moderate	Activities may attract attention, but should not dominate the view.
Class IV	Provide for management activities, which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.	High	Activities may attract attention, may dominate the view.

Affected Environment

The Ely District is typical Basin and Range topography with north to south trending mountain ranges with valleys in between. Vegetation is predominantly grasses and shrubs in the valleys leading to pinion and juniper woodlands on the ranges. Vegetation colors are predominantly tan, light sage green to darker greens. Exposed rock is limestone, quartzite, and some volcanic with colors of grey, tan, brown. Soils have similar lighter colors of grey, tan and brown. Typical visible man made features in the areas could include, roads, vegetation treatments, mining activity, fences, power lines, and range improvements. On the Ely District, the VRM classes are primarily situated as follows. VRM Class I- All Wilderness, Wilderness Study Areas and Blue Mass Scenic Area. VRM Class II- majority of the ranges, the Pony Express corridor and other visually important areas. VRM Class III- most valleys. VRM Class IV- mostly large wide valley bottoms and an energy corridor.

Group 1 parcels are located within VRM Class II, III and IV. These parcels are located in the remote northeastern edge of the Ely District within Antelope Valley, North Spring Valley and portions of the Antelope Range and Kern Mountains.

Group 2 parcels are located within VRM Class I, II, III and IV. These parcels are located in the northcentral part of the District. The parcels surround the town of Cherry Creek and lie within Steptoe Valley, Butte valley and Egan Basin and portions of the Cherry Creek and Egan ranges.

Group 3 parcels are located within VRM Class II, III, and IV. These parcels are located in the remote northwestern edge of the Ely District in Newark and Long Valleys, Bald Mountain, Buck Mountain, Alligator Ridge, Tognini Mountains, and the Maverick Springs Range.

Group 4 parcels are located within VRM III and IV. These parcels are located in Jakes Valley between Highway 6 and 50 and east of the Humboldt National Forest.

Group 5 parcels are located within VRM Class III and IV. These parcels are located in the central eastern edge of the District within Big Sand Springs Valley and railroad Valley.

Environmental Effects

The actual sale of the lease parcels would not impact visual resources, though the development of the leased parcels may impact visual resources. When an APD is submitted, a site-specific visual contrast rating would be conducted. The contrast rating would identify what types of mitigation are needed to minimize any visual contrast. Those recommended mitigation measures would be incorporated into the APD as a means to meet the VRM class objective.

Proposed Action

Group 1, 2, 3, 4, and 5 parcels that are within VRM III and IV should meet the class objectives by incorporating design features or requiring mitigation measures.

Group 1, 2, and 3 parcels within VRM Class II may or may not meet the class objective. In all instances there should be design features and mitigation measures incorporated that would help keep the contrast low and aid in not attracting attention. In addition, the locations topography may aid in hiding or obscuring development or production facilities. In some instances even with design features and mitigation measures incorporated, due to the location and visibility of the parcel, development and production facilities would be seen and would attract attention. The majority of VRM Class II associated with these parcels is the Pony Express VRM Class II corridor.

Within Group 2, there are 2 parcels that have VRM Class I within them. They are Parcel NV-18-12-133 which has 1218 acres of VRM Class I, and Parcel NV-18-12-159 which has 17 acres of VRM Class I. This VRM Class I acreage within these parcels are an error and should be VRM Class III. However, this acreage will be managed to meet the VRM Class I objective until this error is changed through an RMP maintenance action or an RMP amendment. It would be very difficult to approve any exploration or production facilities within this current VRM Class I acreage. However, exploration and production within this acreage could occur from outside the acreage through horizontal drilling.

No Action Alternative

Under No Action Alternative the lease sale would not occur, therefore no additional impacts to visual resources would occur.

3.3.11. Livestock Grazing

Affected Environment

For the purpose of this EA the Affected Environment for the proposed oil and gas leasing area is the same as that described in Section 3.5 of the RMP/FEIS.

The Ely District BLM authorizes livestock grazing use on all allotments which overlap the proposed oil and gas leasing area. The list of affected allotments and the parcel group they fall in are listed below in Table 3.9.

Table 3.9 Grazing Allotments in the Lease Sale Area

Grazing Allotment	Allotment Number	Parcel Group
Chin Creek	NV10104	Group 1
Tippet	NV10106	Group 1
Sampson Creek	NV10105	Group 1
Red Hills	NV00108	Group 1
Tippet Pass	NV20107	Group 1
Medicine Butte	NV00501	Group 2
Gold Canyon	NV00413	Group 2
Cherry Creek	NV00403	Group 2
Big Rock Seeding	NV00428	Group 2
Middle Steptoe	NV00411	Group 2
Duck Creek Flat ¹	NV00412	Group 2
Warm Springs	NV00606	Group 3
Maverick Springs	NV00621	Group 3
Warm Springs Trail	NV00622	Group 3
Tom Plain	NV00803	Group 4
Indian Jake	NV00804	Group 4
Badger Spring	NV00823	Group 4
Jakes Unit Trail ²	NV00804	Group 4
Moorman Ranch	NV00802	Group 4
Duckwater	NV00701	Group 5
Sand Springs ²	NV10056	Group 5

¹Allotment includes <10% area of 1 parcel

²Group 5 is located in Nye County. Leasing parcels in Group 5 are located within the Duckwater Allotment (#00701). 6-7 parcels are located in the Bull Creek Use Area/ Pasture of the allotment.

The remaining parcels in Group 5 are located in the South Sand Springs Use Area of the allotment. Three parcels overlap or are located in the Sand Springs Allotment.

Term permits authorize grazing use based on perennial vegetation. Authorized grazing use includes both cattle and sheep. Allotment grazing periods of use vary and include both seasonal and yearlong. Seasons include fall/winter/spring period and spring/summer/fall period. Grazing systems may include rest-rotation, deferred rotation, and deferred rest rotation. Allotments that are grazed both yearlong and seasonally include herding of cattle and sheep between public land allotments, base property, other leased or private pasture and U.S. Forest Service-administered lands. Some allotments are grazed in common by two or more livestock permittees. Livestock are either mixed together in the same use area or graze in separate use areas of the allotment. Authorized grazing use is in accordance with established use periods or seasons of use for the allotment.

Environmental Effects

Proposed Action

There would be no direct effects from issuing new oil and gas leases because leasing does not directly authorize oil and gas exploration and development activities. Should exploration or development be proposed within leased parcels, additional, site specific NEPA analysis would be completed to assess the potential impacts to livestock grazing within the project area when an APD is submitted.

Under the proposed action for the lease sale, livestock grazing would continue; however, should development occur on the lease, loss of forage and possible reductions of AUMs could occur in the allotments due to disturbance and activity. Range improvements and livestock movement patterns could be hindered by new roads and oil well pads. Increased traffic may lead to an increase in vehicle livestock collisions, and increasing mortality rates. Potential impacts to specific range improvements would be analyzed with site-specific NEPA review at the APD stage. Mitigation measures would be included with the lease protecting range improvements.

No Action Alternative

Under the No Action Alternative, the lease sale would not occur and no impacts to livestock grazing resources would occur.

3.3.12. Geology and Mineral Extraction

The area of direct and indirect effects is defined as the footprint of the proposed lease parcels. The parcels are grouped into five groups: Group A, Group B, Group C, Group D, and Group E. Refer to Map 1 and Appendix C for location and listing of parcels in each group.

Ely District Geology

The Ely District falls within the basin and range province where much of the topography includes island like mountain ranges and intermontane basins filled by alluvium shed off the surrounding ranges. Most of the mountain ranges are oriented north-south. Several of the basins are interconnected and allow surface drainage to flow between them. However, some basins are sealed off and the drainage within the basin does not flow outside the basin, at least at the surface. Tschanz and Pampeyan (1970) described the lithology and stratigraphy in the Ely District.

Locatable Minerals

Locatable minerals are mostly metallic minerals, semi-precious and precious gemstones, and rare earth elements. Metallic minerals include precious metals such as gold, silver, and base metals (zinc, molybdenum, nickel, cinnabar, lead, tin, and copper). Some nonmetallic minerals can also be considered locatable such as bentonite, borax, fluor spar, and gypsum. Uranium, a rare earth element is often considered a locatable mineral. These minerals are explored and developed pursuant to the Mining Law of 1872, as amended and the Federal Land Policy and Management Act of 1976, and often occur on mining claims.

Mineral Materials (Salable Minerals)

Mineral materials (salable minerals) are available through a series of competitive and non-competitive sales and by free use permit to governmental agencies and non-profit organizations pursuant to the Materials Act of July 31, 1947, as amended, the Surface resources Act of 1955, and the Federal Land Policy and Management Act of 1976. Salable minerals include common varieties of sand, gravel, stone, pumice, pumicite, cinders, and clay. These resources are abundant throughout the Ely District and are often concentrated in the basins.

Leasable Minerals

Leasable minerals include coal, phosphate, oil, oil shale, gas, and sodium resources on the public domain as designated by the Mineral Leasing Act of 1920 as Amended. The Mineral Leasing Act was amended to include minerals associated with lands acquired by the United States and by the Geothermal Steam Act of 1970 to include geothermal resources. Leasable minerals under federal ownership are available for development through the BLM's leasing program. There are minimal to no known economic deposits of coal, phosphate or sodium in the Ely District. Geothermal resources occur throughout the Ely District as well. However, no leases or production have been authorized on the nominated lands. The regions of the

Ely District vary from low to high potential for oil, oil shale, and gas deposits. Further details on oil and gas geology and potential can be found in Chapter 1.

Environmental Effects

This section discusses the potential impacts from leasing nominated parcels according to the three alternatives. Information on mineral claims, leases, exploration, and development was obtained using reports pulled from BLM's Oracle Legacy Rehost software, "LR2000 database," on May 12-13, 2018.

Proposed Action

Locatable Minerals

Several lode and placer mining claims occur in Parcel Groups A, B, and C and overlap nominated parcels. Additional research involving the Nevada State Office and county courthouses to determine if the claims truly overlap the parcels is not necessary for this level of analysis. Further research would be conducted during site-specific NEPA analysis when an APD is submitted, given the parcels would be leased. Mining operations have been authorized in numerous Township and Ranges, which overlap nominated parcels (Table B2 in Appendix B) and are managed under the Multiple Mineral Development Act (30 U.S.C. § 521 et seq.). The majority of parcels in Group 3 are located within the authorized Plans of Operation for Kinross Gold-Bald Mountain Mine (Map A15). There are three active mining Plans of Operation authorized for: 1) North Area of Operations, 2) South Area of Operations, and 3) Exploration. The active mining for these Plans of Operations include pits, leach pads, waste rock storage facilities, haul roads, exploration roads, exploration drill pads, and other facilities/infrastructure at the Bald Mountain Mine.

Oil and Gas leasing, exploration, and development could interfere with the exploration and extraction of locatable minerals on these parcels. Potential interference may be mitigated at the time of development by coordination and agreement between the operators. Additionally, oil and gas exploration and development in Nevada typically involves reclamation within ten years; therefore, it may only temporarily effect locatable mineral operations, if simultaneously authorized.

Mineral Materials

Nevada Department of Transportation holds federal aid highway materials sites within Parcel Groups B, which contain nominated parcels NV-18-12-148 and NV-18-12-151. While drilling within these active sites could interfere with the gravel operation, it is likely that with current technologies, the well could be located within the parcel off the mineral materials sites and still access potential oil and gas deposits at depths below the gravel pit.

A lease notice would be attached to parcels NV-18-12-148 and NV-18-12-151 notifying the lessee that a mineral material site occurs on the parcel.

Leasable Minerals

No nominated lands contain existing leases. Issuing oil and gas leases on these lands would allow for development of potential oil, oil shale, and gas deposits, and should have minimal to no effect on potential future development of other leasable minerals (e.g. geothermal, phosphate, sodium, etc.).

No Action Alternative

The No Action Alternative would not have an effect on locatable minerals, mineral materials, or leasable minerals except that it would reduce the opportunity for exploration and discovery of potential oil and gas deposits that are needed to supply local, regional, and national needs.

3.3.13. Wastes, Hazardous and Solid

Affected Environment

The majority of the proposed lease parcels are in rural areas and not adjacent to any schools or populated centers. However, there are several ranches and ranching/mining communities within close proximity.

Environmental Consequences

Proposed Action

Oil and gas activities including exploration drilling, extraction, production facilities, pipeline transport, and tanker loading, unloading and transport, have the potential to affect the environment through production of waste fluids, emissions and site impacts resulting from field development and related infrastructure. Oil spills, produced waters, drill fluids/cuttings, and hazardous materials could be encountered at a facility or drill pad. Under any alternative, all appropriate statutes, regulations and policies (see Section 1.4) and Gold Book standards, guidelines and BMPs would be applied.

The RFFD scenario (Section 2.4) predicts that approximately 200 exploration wells would be drilled in the District in the next 10 years, of which 40 would continue into development and production phases.

Examples of indirect (future) environmental impacts from hazardous materials, hazardous waste, and solid waste which might be encountered during each phase are provided below. However, most of these incidental impacts, if not all, can be avoided or lessened through proper inspection and maintenance.

Exploration: Impacts could include drilling fluid or hydrocarbon spills, leakage from improperly constructed reserve pits or wastewater collection systems, improperly handled brine backflow water from drilling that may or may not have used HF technology, and accumulations of solid waste, which could impact water quality or contaminate soils. Hydrocarbon spills could consist of hydraulic fluid, gasoline, diesel, oil, or grease from vehicles, generators, and exploration drill rigs. Backflow water from exploration drilling can be extremely saline; improper disposal could raise the pH of existing surface waters to unacceptable levels. Accumulations of nonhazardous solid waste could include trash, drill cuttings or mud, wastewater, bentonite and cement generated during drilling operations.

Development: Impacts could be the same as in the exploration phase; however, the quantities of hazardous materials, hazardous waste, or solid waste used and generated could be greater. Accidental releases from reserve pits or waste water collection systems could include hazardous water treatment chemicals such as chlorine. Also, stormwater runoff could contain elevated quantities of heavy metals and volatile organic compounds. When fracked water comes back to the surface as backflow, it can contain high levels of salts, introduced chemical additives, and various chemicals and compounds that occur naturally within the earth. Backflow spills have been known to kill off all vegetation and render the soil unusable. Nonhazardous solid waste such as drill cuttings or mud could be generated at this stage.

Production: Routine plant operations could involve leaks or spills of substances such as hydraulic fluid, gasoline, diesel, oil, paint, antifreeze, cleaning solvents, transformer insulating fluid, and grease. These discharges could result in impacts to water, soil, air, and wildlife. Stormwater runoff containing heavy metals and VOCs could be problematic. Nonhazardous solid waste could also be generated.

Final Abandonment: The operator would identify, remove, and properly dispose all hazardous materials, hazardous waste, and solid waste. Spills could occur during removal.

When the RFD scenario is considered, impacts would generally be negligible because the substances involved would be properly handled, stored, and disposed of in accordance with applicable federal, state and local regulations. Proper management of these substances would ensure that no soil, ground water, or surface water contamination would occur with any adverse effect on wildlife, worker health and safety, or surrounding communities. Additional project- and site-specific environmental analysis of any future exploration, development and/or production would allow inclusion of updated mitigation measures, BMPs, and COAs; and performance standards would be defined at that time.

Impacts of any hazardous waste spills in areas with water resources would be potentially substantial and difficult to mitigate. The CSU Water Resources stipulation would require avoiding impacts within 500 feet of surface waters and riparian areas; impacts within 100 feet of ephemeral streams; and impacts to floodplains and playas. Application of this stipulation would not only prevent surface disturbance within the defined areas but would also prevent indirect impacts including accidental contamination.

No Action Alternative

Under the No Action Alternative, the lease sale would not occur and there would be no concerns or issues with solid of hazardous wastes.

3.3.14. Noxious and Invasive Weeds

Affected Environment

Noxious and invasive weeds are present within the lease sale area. Table 3.10 and 3.11 below describe noxious and invasive species present within or adjacent to each Parcel Group.

Table 3.10 Noxious species present by Parcel Group

COMMON NAME	LATIN NAME	NEVADA NOXIOUS WEED CATEGORY (NAC 555.010)	PARCEL GROUPS AFFECTED
Black Henbane	<i>Hyoscyamus niger</i>	CATEGORY A*	3, 4
Houndstongue	<i>Cynoglossum officinale</i>		1
Spotted knapweed	<i>Centaurea biebersteinii</i>		2, 3, 4
Squarrose knapweed	<i>Centaurea virgata</i>		1
Musk thistle	<i>Carduus nutans</i>	CATEGORY B**	1, 2, 3
Russian knapweed	<i>Acroptilon repens</i>		1, 2, 3
Scotch thistle	<i>Onopordum acanthium</i>		1, 2, 3

Canada thistle	<i>Cirsium arvense</i>	CATEGORY C***	1, 2, 3
Hoary cress	<i>Cardaria draba</i>		2, 3, 4, 5
Perennial pepperweed	<i>Lepidium latifolium</i>		1, 2, 5
Salt Cedar (Tamarisk)	<i>Tamarix</i> spp.		1, 2
Water hemlock	<i>Cicuta maculata</i>		1, 2

* Category A noxious weeds are weeds that are generally not found or that are limited in distribution throughout the state.

** Category B noxious weeds are weeds that are generally established in scattered populations in some counties of the state.

*** Category C noxious weeds are weeds that are generally established and generally widespread in many counties of the state.

Table 3.11 Invasive species (not noxious) present by Parcel Group

COMMON NAME	LATIN NAME	PARCEL GROUPS AFFECTED
Cheatgrass	<i>Bromus tectorum</i>	1, 2, 3, 4, 5
Bur buttercup	<i>Ceratocephala testiculata</i>	1, 2, 3, 4, 5
Bull thistle	<i>Cirsium vulgare</i>	1, 2, 3
Field bindweed	<i>Convolvulus arvensis</i>	1, 2, 3, 4
Russian olive	<i>Elaeagnus angustifolia</i>	1, 2, 3, 4, 5,
Filaree	<i>Erodium cicutarium</i>	1, 2, 3, 4, 5
Kochia	<i>Kochia scoparia</i>	1, 2, 3
Halogeton	<i>Halogeton glomeratus</i>	1, 2, 3, 4, 5
Russian thistle	<i>Salsola kali</i>	1, 2, 3, 4, 5
Tumble mustard	<i>Sysimbrium altissimum</i>	1, 2, 3, 4, 5
Yellow salsify	<i>Tragopogon dubius</i>	1, 2, 3
Common mullein	<i>Verbascum thapsus</i>	1, 2, 3, 4

Environmental Consequences

Proposed Action

There would be no direct effects from issuing new oil and gas leases because leasing does not directly authorize oil and gas exploration and development activities. Direct impacts from these activities would be analyzed under a separate site-specific NEPA analysis. The RFFD scenario is the basis for indirect future or potential impacts that could occur once the parcels are leased. General short term and long term impacts of oil and gas to general wildlife species are discussed in the Ely RMP/EIS (2007) in Section 4.21 Noxious and Invasive Weed Management on pages 4.21-4 – 4.21-5.

Impacts from the lease sale would not result in the transportation or proliferation of weeds. Future mineral operations would be conducted in compliance with best management practices, thereby minimizing weed-related impacts.

No Action Alternative

Under No Action Alternative, noxious and invasive weeds would not be affected by lease sale activities.

Chapter 4. Cumulative Impacts

4.1. Resources

As required under the National Environmental Policy Act (NEPA) and the regulations implementing NEPA, this section analyzes potential cumulative impacts from past, present, and reasonably foreseeable future actions combined with the Proposed Action within the area analyzed for impacts in Chapter 3 specific to the resources for which cumulative impacts may be anticipated.

A cumulative impact is defined as “the impact which results from the incremental impact of the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 Code of Federal Regulations (CFR) 1508.7).

The geographic scope of a cumulative effect is defined with the Cumulative Effects Study Area (CESA). CESAs are defined for each resource evaluated. Two or more resources may have the same CESA. For the purpose of this EA, only indirect impacts are discussed in this section. Direct incremental cumulative impacts from a potentially proposed oil well would be analyzed during the APD review process. There are no cumulative impacts from leasing. The following is a discussion of cumulative impacts resulting from potential future development. There would be no cumulative impacts to Cultural Resources or Livestock Grazing as a result of implementing the Proposed Action.

4.2. Past, Present, and Reasonably Foreseeable Future Actions

Past Actions

The Ely District is rich in natural resources and the cumulative effects study area has been used for a wide array of activities over the years. Mining, grazing, recreation, realty actions, and oil exploration have been conducted throughout the Ely District and more than likely, would continue for many more years. While more than 200 wells have been drilled in the Ely District, only two are in production.

Present Actions

Refer to the affected environment discussions in Chapter 3 for presently authorized activities affecting the nominated parcels.

Reasonably Foreseeable Future Actions

Table 4.1 shows a list of Reasonably Foreseeable Future Actions (RFFA) that have been analyzed for environmental impacts within the project area. Mining, grazing, recreation, realty actions, fuels treatments and oil exploration are being conducted throughout the District. For purposes of this cumulative impacts analysis the project area includes White Pine County and the northwestern corner of Nye County. The approximate total ground disturbance of RFFAs is 154,791 acres.

Table 4.1 Reasonably Foreseeable Future Actions

Project Name	Location (County)	Type of Action	Acres of Disturbance
White Pine County Conservation, Recreation, and Development Act (WPCCRDA) Round #2 Sales/Disposal	White Pine	Land and Realty	432
Western Oil: Scott Federal 25-1	White Pine	Mining	3
Major Oil: Eblana #1A	White Pine	Mining	6
Major Oil: Eblana #6	White Pine	Mining	6

Gold Rock Mine Project	White Pine	Mining	3,946
Pan Mine Project	White Pine	Mining	3,301
Bald Mountain Mine North and South Operations Area Projects	White Pine	Mining	7,097
Total			14,791

4.2.1. Air Quality Proposed Action

Cumulative impacts to air quality would occur only as a result of APD approval and subsequent development, and not from the proposed action of offering the lease parcels. Impacts to air quality within the CESAs for air quality from past and present actions have included particulate (PM_{2.5} and PM₁₀) and combustion emissions from agriculture, road construction and maintenance, off-highway vehicle (OHV) use and recreation, exploration, mining and processing activities, aggregate operations, public land management activities, and wildland fire. All activities within the CESAs with more than five acres (20 acres for minerals projects) of surface disturbance would operate under an air quality permit from the State of Nevada Bureau of Air Pollution Control (BAPC). Impacts to air resources from past and present actions in the CESAs are considered to be moderate lasting only as long as the activities persist. Impacts to air quality from Reasonably Foreseeable Future Actions (RFFAs) could result from the generation of dust and combustion emissions from OHV use and recreational traffic on unpaved roads, livestock grazing, agricultural use, road construction and maintenance, exploration, aggregate operations, public land management activities, and fugitive emissions from wildland fire. Dust from public traffic on unpaved roads would likely create a low impact to air quality.

The cumulative impact on air quality from the incremental impact of the proposed action when added to the past actions, present actions, and RFFAs would be fugitive, point source, and related mobile combustion emissions, which would remain low. Any air quality regulations implemented by BAPC and the BLM help to maintain the attainment status of the current regional air quality.

No Action Alternative

The No Action Alternative would have no impacts air quality in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.2. Floodplains Proposed Action

Cumulative impacts to floodplains would occur only as a result of APD approval and subsequent development, and not from the proposed action of offering the lease parcels. Impacts to floodplains within the water resources CESAs have resulted from past and present actions such as grazing, road construction and maintenance, OHV use and recreation, mining and processing activities, aggregate operations, public land management activities, and wildland fire. Reclamation of areas disturbed from past and present actions and natural revegetation have helped to minimize impacts to floodplains.

Impacts to floodplains from RFFAs would be similar to those described above for past and present actions. Though mining and exploration activities are not likely to be permitted within flood-prone areas, disturbances from permitted mining and exploration activities would be minimized through implementation of environmental protection measures.

The cumulative impact to floodplains from the incremental impact from parcel development following an APD approval, when added to the past actions, present actions, and RFFAs may add effects such as soil disturbance, compaction, and increased erosion. However, stipulations and conditions of approval, coupled with compliance with state and federally-imposed regulations would help to minimize the level of these incremental impacts.

No Action Alternative

The No Action Alternative would have no impacts floodplains in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.3. Threatened and Endangered Species

Proposed Action

Cumulative impacts to threatened and endangered species, particularly the Railroad Valley Springfish, would occur only as a result of APD approval and subsequent development, and not from the proposed action of offering the lease parcels. Impacts to Railroad Valley springfish within the CESA from past and present actions include trampling from livestock, irrigation, stream diversion and channelization, and the introduction of non-native fish. Impacts to the Railroad Valley springfish from RFFAs could result from additional livestock grazing, irrigation, and non-native fish. The cumulative impact on the Railroad Valley springfish from the incremental impact of the proposed action when added to the past actions, present actions, and RFFAs could potentially lead to the loss of habitat due to groundwater contamination or a drawdown in groundwater levels. Stipulations require Section 7 Consultation with the US Fish and Wildlife Service for parcels within the CESA to ensure protection to the species.

No Action Alternative

The No Action Alternative would have no additional impact to threatened and endangered species. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.4. Water Quality, Surface/Ground

Proposed Action

Cumulative impacts to water quality and surface and groundwater resources would occur only as a result of APD approval and subsequent development, and not from the proposed action of offering the lease parcels. Impacts to water quality, surface water resources, and groundwater resources within the CESAs for these resources have resulted from past and present actions such as grazing, road construction and maintenance, OHV use and recreation, mining and processing activities, aggregate operations, public land management activities, and wildland fire. Reclamation of areas disturbed from past and present actions and natural revegetation have minimized impacts to water quality and surface water and ground water resources.

Impacts to water quality and surface water and ground water resources from RFFAs would be similar to those described above for past and present actions. Disturbances from permitted mining and exploration activities would be minimized through implementation of environmental protection measures.

The cumulative impact to water quality and surface water and ground water resources from the incremental impact from parcel development following an APD approval, when added to the past actions, present actions, and RFFAs may add effects such as fluid fluxes into groundwater and sediment influx to surface water. However, stipulations and conditions of approval, coupled with compliance with state and federally-imposed regulations would help to minimize the level of these incremental impacts.

No Action Alternative

The No Action Alternative would have no impacts on water quality and surface and groundwater in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.5. Wetlands/Riparian Zones

Proposed Action

Cumulative impacts to riparian zones would occur only as a result of APD approval and subsequent development, and not from the proposed action of offering the lease parcels. Impacts to riparian zones within the riparian zone CESAs have resulted from past and present actions such as grazing, road construction and maintenance, OHV use and recreation, mining and processing activities, aggregate operations, public land management activities, and wildland fire. Reclamation of areas disturbed from past and present actions and natural revegetation have minimized impacts to surface water and ground water quality.

Impacts to riparian zones from RFFAs would be similar to those described above for past and present actions. Disturbances from permitted mining and exploration activities would be minimized through implementation of state and federally-imposed environmental protection measures.

The cumulative impact to riparian zones from the incremental impact from parcel development following an APD approval, when added to the past actions, present actions, and RFFAs may add effects such as sediment delivery into riparian areas, introduction of chemicals into riparian areas via surface and groundwater transport processes, and drawdown effects related to groundwater pumping. However, stipulations and conditions of approval, coupled with compliance with state and federally-imposed regulations would help to minimize the level of these incremental impacts.

No Action Alternative

The No Action Alternative would have no riparian zones in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.6. Lands with Wilderness Characteristics

Proposed Action

The actual sale of these parcels would have no cumulative impact on LWC.

There has not been a land use plan amendment to determine if or how these LWC units would be managed to protect the wilderness characteristics. Currently the EYDO has updated the LWC inventory and determined that these 8 units possess LWC but are not managing for the protection thereof.

If fluid minerals are discovered and these parcels were to go into production even with design features and mitigation incorporated there could potentially be negative cumulative impacts to LWC with a potential loss of or impact to naturalness of 31,414 acres of LWC as well as greater loss of outstanding solitude and primitive & unconfined recreation.

No Action Alternative

There would be no cumulative negative impact.

4.2.7. Fish and Wildlife, Special Status Species

Proposed Action

Cumulative impacts to fish and wildlife, including special status species, would occur only as a result of APD approval and subsequent development, and not from the proposed action of offering the lease parcels. Impacts to wildlife within the CESAs from past and present actions include agriculture, road construction and maintenance, off-highway vehicle (OHV) use and recreation, exploration, mining and processing activities, aggregate operations, public land management activities, livestock grazing, wild horses and wildland fire.

Impacts to wildlife from RFFAs could result from recreation, livestock grazing, agricultural use, road construction and maintenance, exploration, aggregate operations, public land management activities, wild horses, and wildland fire.

The cumulative impact on wildlife from the incremental impact of the proposed action when added to the past actions, present actions, and RFFAs would be the additional loss of habitat, habitat fragmentation, displacement, and loss of some individuals. Stipulations applied to the lease parcels would minimize impacts to wildlife and crucial habitat.

No Action Alternative

The No Action Alternative would have no additional impact to fish and wildlife. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.8. Visual Resource Management

Proposed Action

The actual sale of these parcels would have no cumulative impact on VRM. However if fluid minerals are discovered and these parcels were to go into production even with design features and mitigation incorporated there could potentially be negative cumulative impacts to VRM. Large-scale production within the area would be seen and would attract attention and could require an RMP amendment with a VRM Class adjustment to Class III or IV.

No Action Alternative

There would be no cumulative impact.

4.2.9. Geology and Mineral Extraction

Proposed Action

Exploration and development for locatable minerals, mineral materials, and leasable minerals have occurred near the nominated lands. The authorized mining projects listed above are in the vicinity of parcel groups A, B, C, D, and E. The RFFD assumes permitting an average of 22 wells for 81 acres of short-term and 33 acres of long-term disturbance each year since 2008. Therefore, 198 wells and 729 acres of short-term and 297 acres of long-term disturbance is assumed to have occurred since 2008. The Ely district has only approved 13 APDs since 2008 averaging a single well per pad, however, not every APD approved is actually drilled and only 10 wells have resulted. Table 4.1 shows three APDs assumed as future actions totaling 15 acres of predicted disturbance. If 22 wells are permitted as a result of offering these parcels for sale, the total number of wells permitted in the Ely District would be 38 of the assumed potential 198. Three APDs were recently of undergoing approval within the project area.

No Action Alternative

The No Action Alternative would have no APDs in the area. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

4.2.10. Waste, Hazardous and Solid

Proposed Action

Other major activities potentially generating hazardous and solid waste include mining and existing oil and gas exploration, development and production projects. Given the small acreage of oil and gas activity disturbance identified in the RFFD (745-5600 acres), as well as any mitigation developed during additional site-specific analysis for oil and gas exploration and development, the contribution to cumulative impacts would be negligible. Also, federal and state governments specifically regulate each

project to ensure that there are no releases of hazardous materials, hazardous waste or solid waste into the environment. As discussed in Section 3.3.13, a slight risk of accidental spillage exists, and the consequences of any spill would be greater in wetlands, springs/seeps, riparian areas, floodplains and seasonally flooded playas. The CSU Water Resources stipulation would generally prevent direct or indirect contamination of these areas.

No Action Alternative

Under the No Action Alternative additional hazardous and solid wastes would not be produced and there would be no cumulative effects.

4.2.11. Noxious Weeds and Invasive Species

Proposed Action

Cumulative impacts to noxious and invasive weeds would occur only as a result of APD approval and subsequent development, not from the proposed action of offering the lease parcels. Past, present and reasonably foreseeable future actions within the CESAs could result in weed spread, thereby directly impacting overall watershed and rangeland health. Activities with the potential to transport and proliferate weeds include agriculture, road construction and maintenance, off-highway vehicle (OHV) use and recreation, exploration, mining and processing activities, aggregate operations, public land management activities, livestock grazing, wild horses and wildland fire.

No Action Alternative

The No Action Alternative would have no additional impact to noxious and invasive weeds. Activities on currently leased parcels adjacent to the proposed parcels would remain on-going as permitted on surrounding federal, state, and private lands.

Chapter 5. Consultation and Coordination

5.1. Individuals, Organizations, and Tribes Consulted

5.1.1. Individuals and Organizations

The BLM consulted with the following individuals and Organizations prior to the Public Comment Period:

- Nevada Department of Wildlife
- United States Fish and Wildlife Service
- Kinross-Bald Mountain Mine
- Ruby Lake Wildlife Refuge
- National Park Service
- National Historic Trail System

5.1.2. Tribes

The BLM Ely District Office, Bristlecone Field Office, reached out to federally recognized tribes, in compliance with Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, by sending consultation letters seeking input on June 6, 2018. The following Tribes were sent consultation letters:

- Cedar Band of Paiute Indians
- Confederated Tribes of the Goshute Reservation
- Duckwater Shoshone Tribe
- Ely Shoshone Tribe
- Indian Peaks Band of Paiute Indians
- Kaibab Band of Paiute Indians
- Kanosh Band of Paiute Indians
- Koosharem Band of Paiute Indians
- Las Vegas Paiute Tribe
- Moapa Band of Paiute Indians
- Paiute Indian Tribe of Utah
- Shivwits Band of Paiute Indians
- Te-Moak Tribe of Western Shoshone
- Te-Moak Tribe of Western Shoshone, Battle Mountain Band
- Te-Moak Tribe of Western Shoshone, South Fork Band
- Te-Moak Tribe of Western Shoshone, Elko Band
- Te-Moak Tribe of Western Shoshone, Wells Band
- Yomba Shoshone Tribe

Chapter 6. List of Preparers

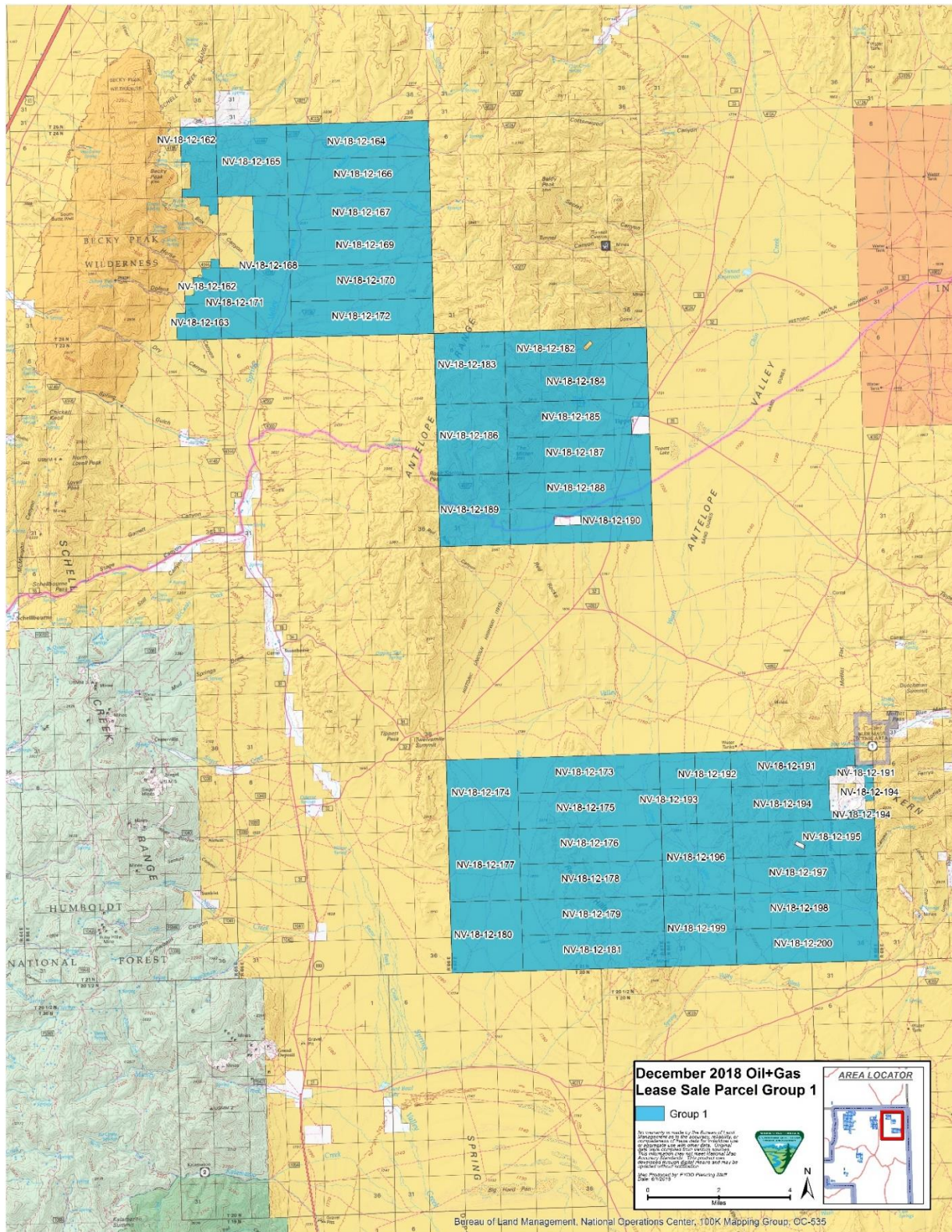
Table 6.1 List of BLM Preparers

Name	Title	Responsible for the Following Resources
Andrew Gault	Hydrologist	Air Quality, Floodplains, Water Quality, Surface and Water Resources, Wetlands and Riparian Zones
Jessica Phelps	Cultural Resources Specialist	Cultural Resources, Special Designations
Nancy Herms	Wildlife Specialist	Migratory Birds, T&E Species, Special Status Species, Fish and Wildlife
Stacy Holt	Environmental Protection Specialist (Minerals)	Mineral Resources
John Miller	Recreation Specialist	Lands With Wilderness Characteristics, Visual Resource Management
Concetta Brown	Planning and Environmental Coordinator	Project Lead , Soci-Economics and Environmental Justice
Alicia Hankins	Land Law Examiner	Lands And Realty
Chris McVicares	Rehabilitation Manager	Noxious and Invasive Weeds
Ian Collier	Rangeland Management Specialist	Livestock Grazing and Vegetation
Ben Noyes	Wild Horse and Burro Specialist	Wild Horse and Burro
Elizabeth Seymore	Native American Tribal Coordinator	Native American Religious Concerns, Tribal Coordination

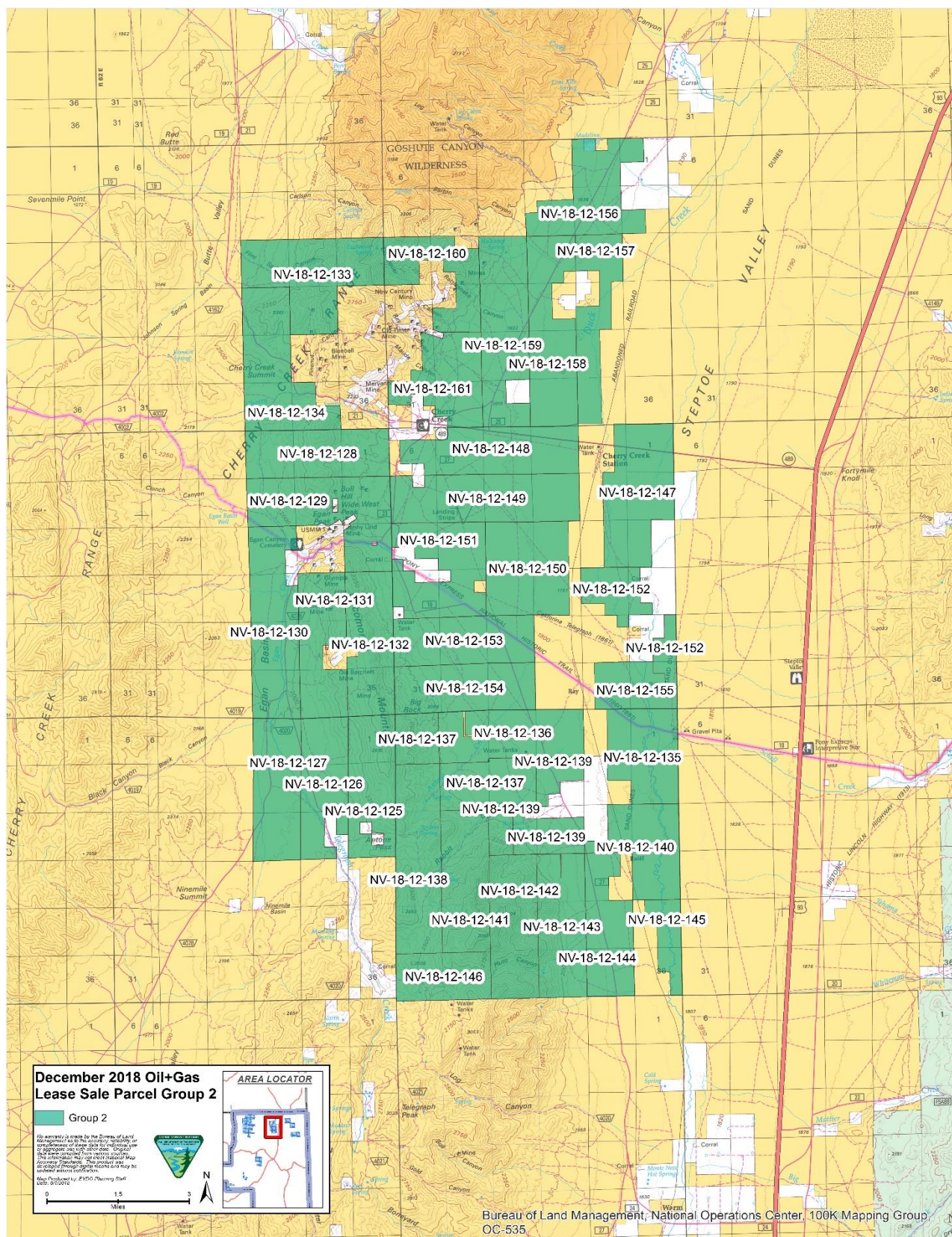
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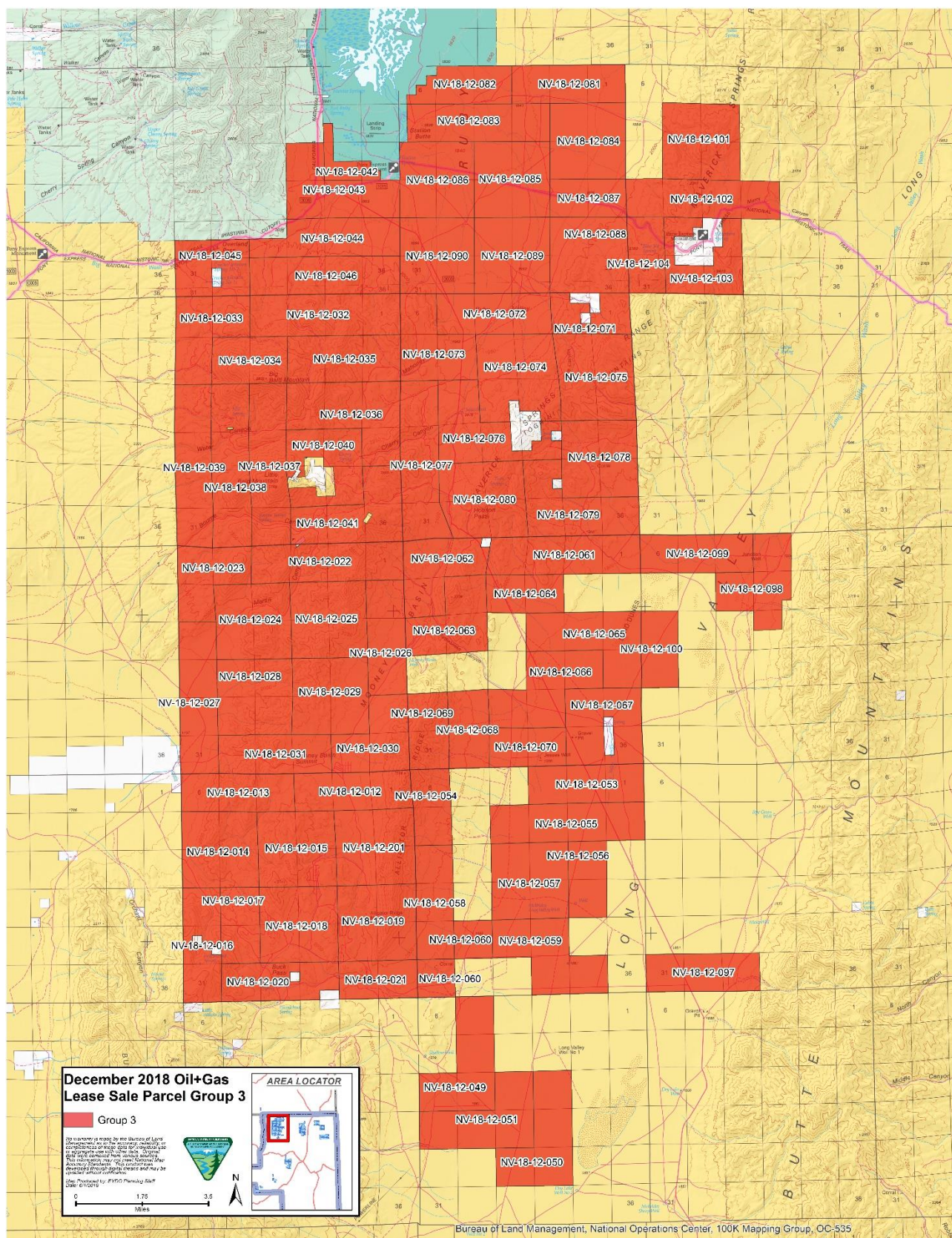
Appendix A-Maps

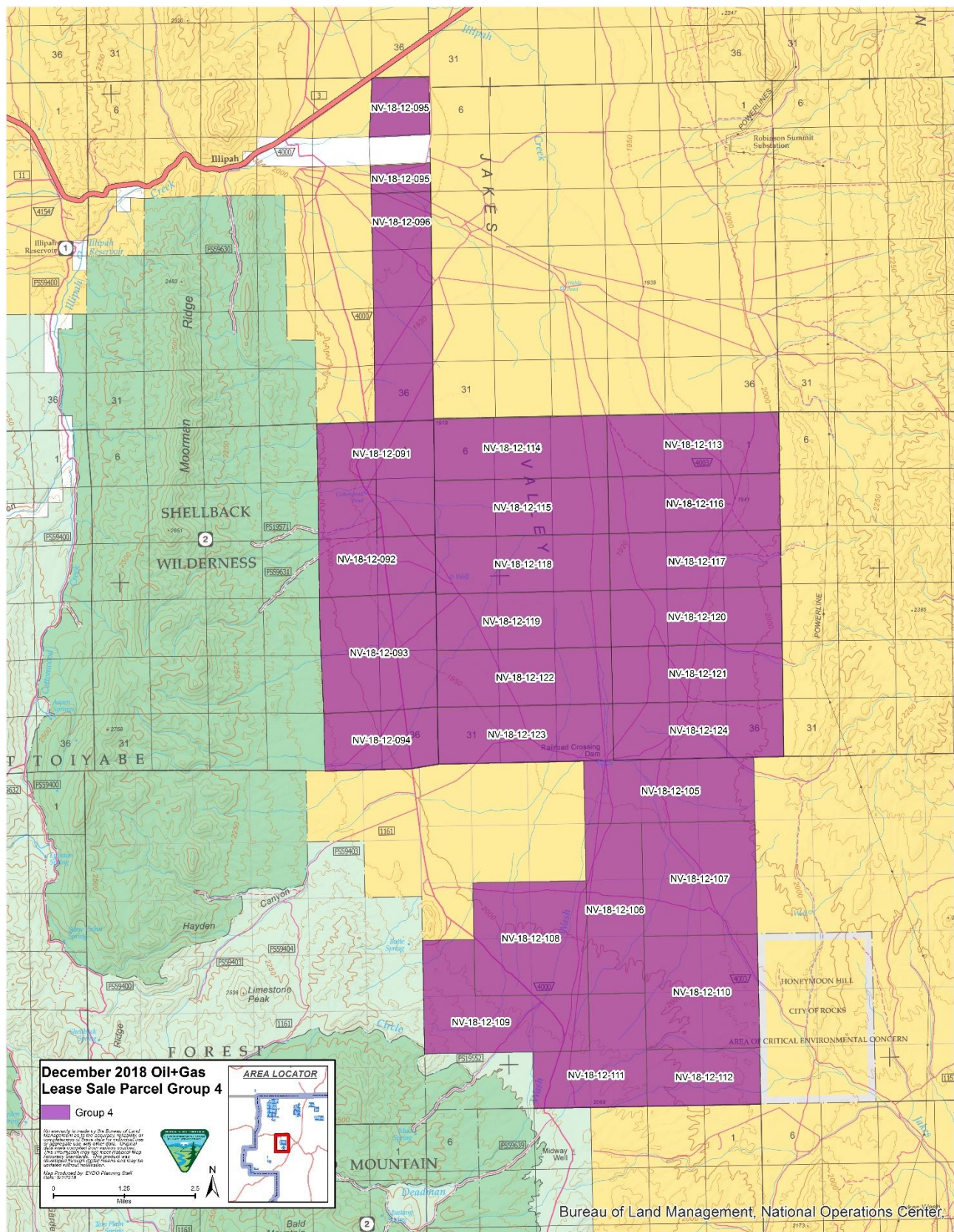


Map A1 Parcel Group 1

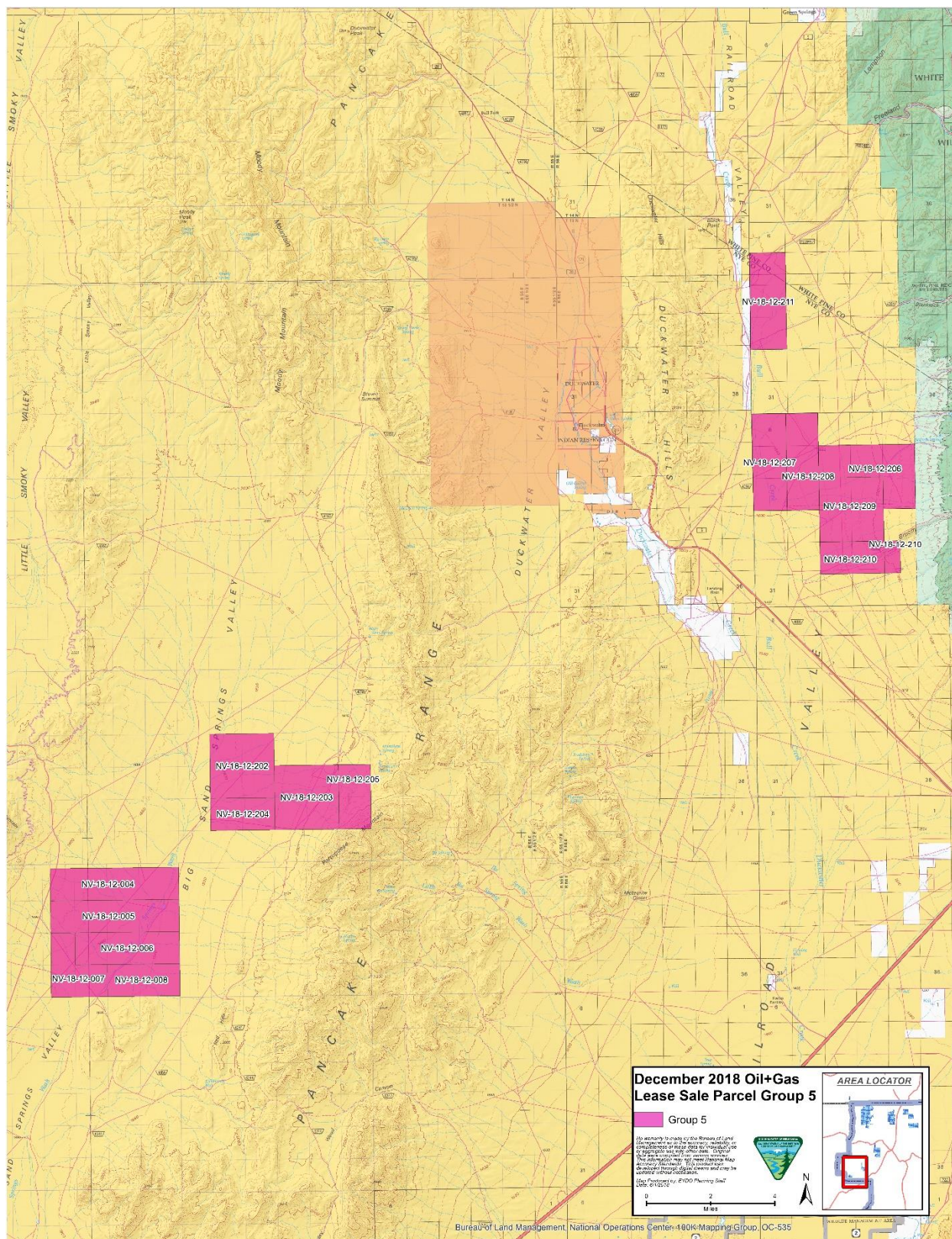


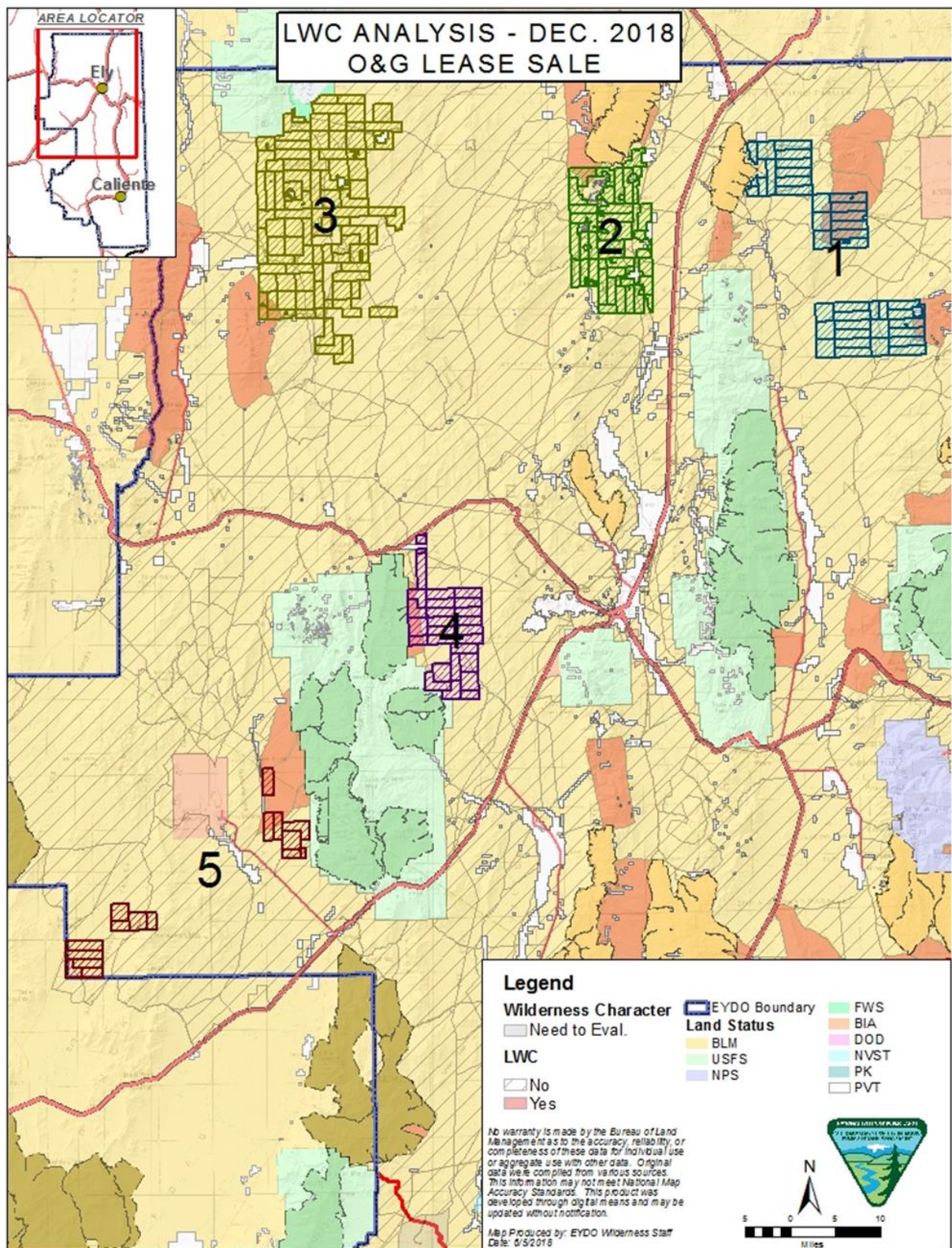
Map A2 Parcel Group 2



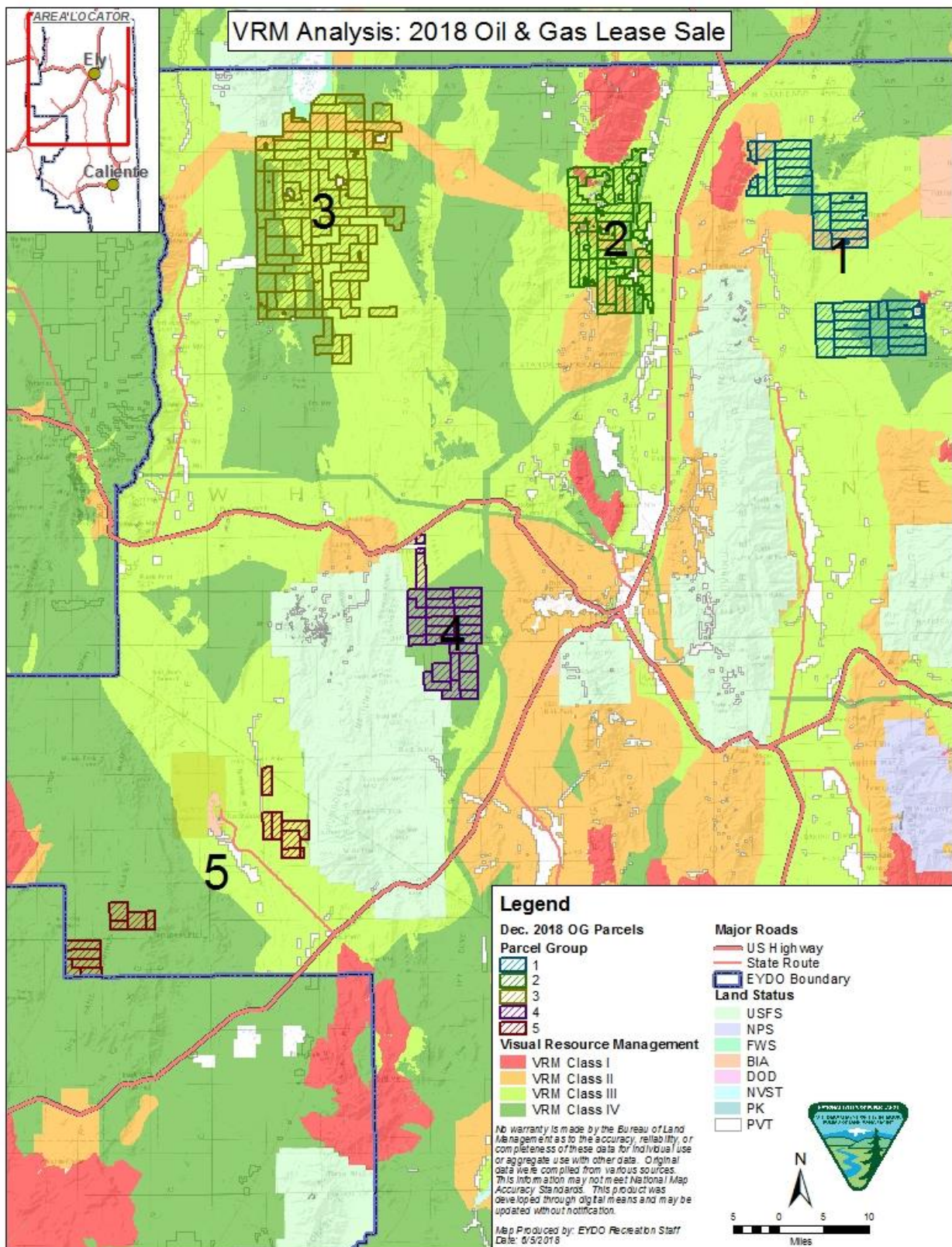


Map A4 Parcel Group 4

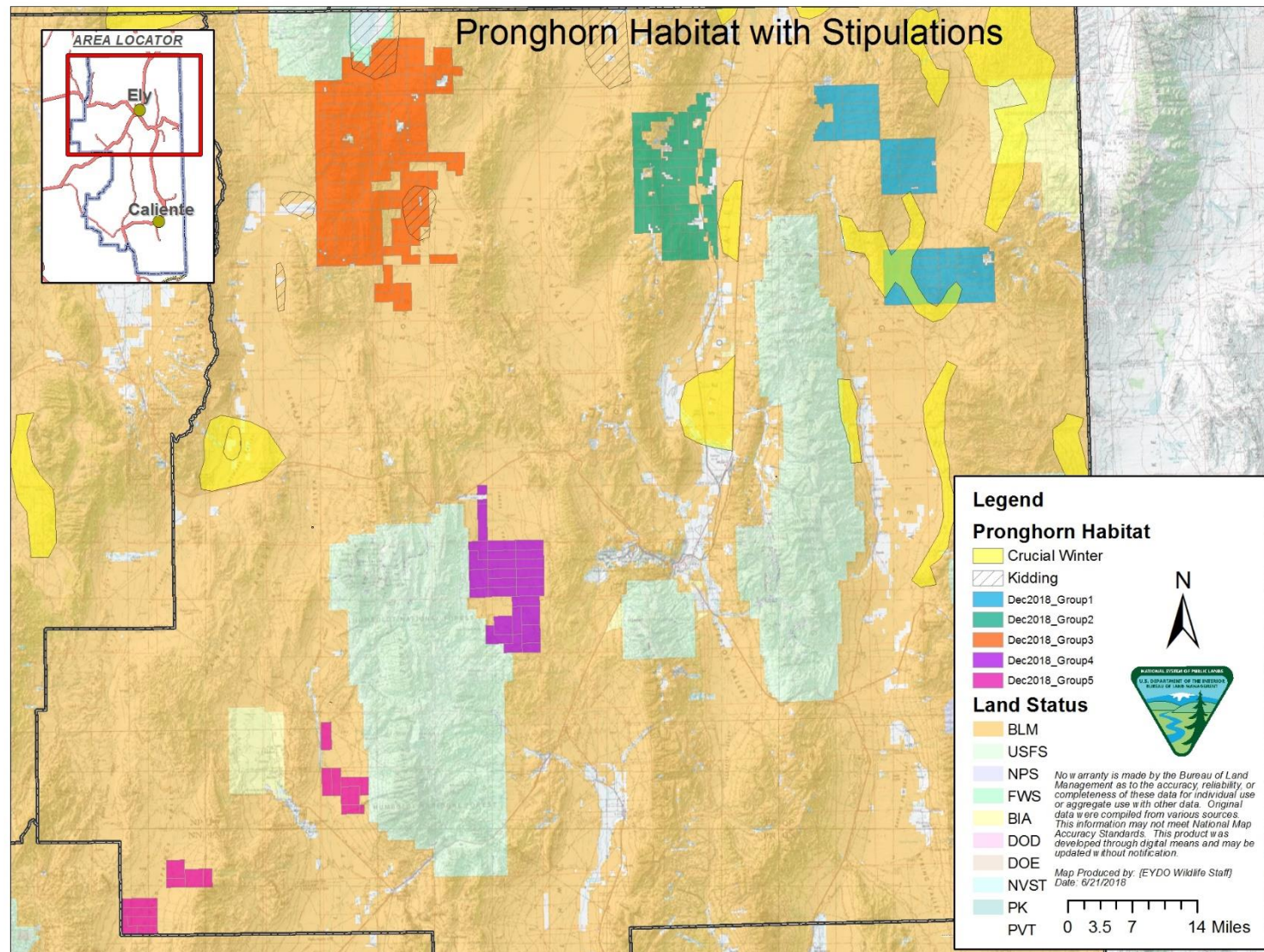




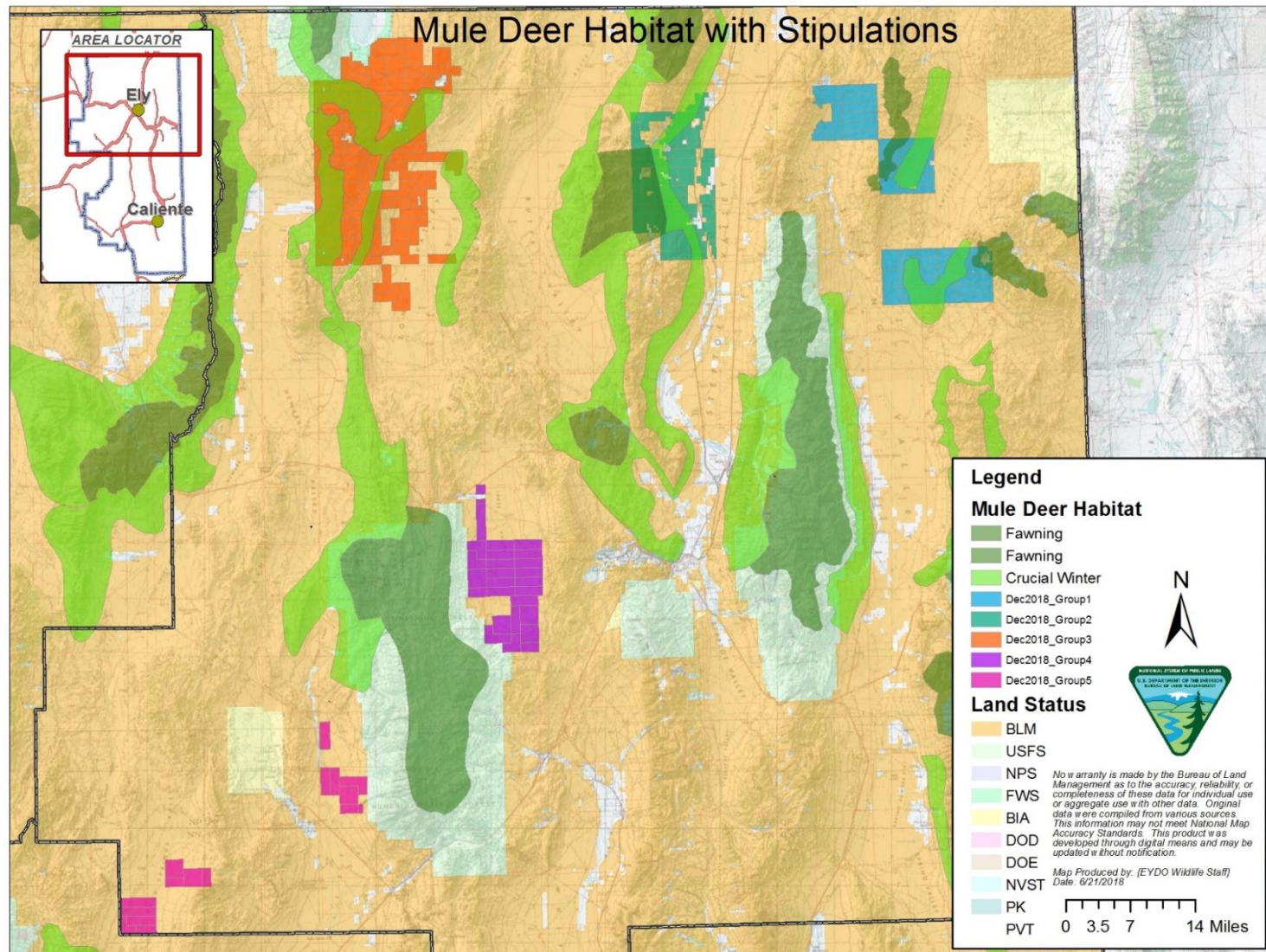
Map A6 Lands with Wilderness Characteristics Analysis Area



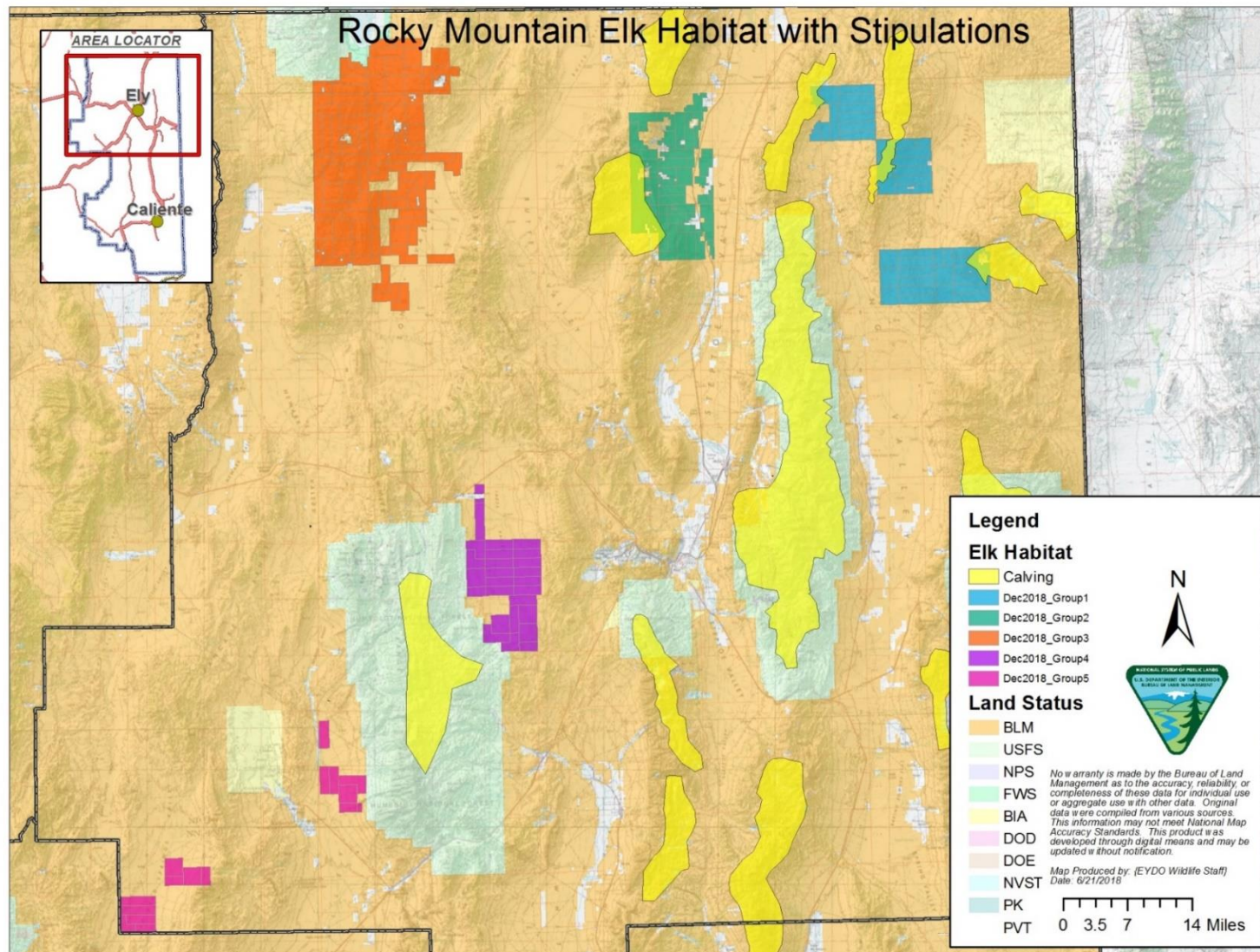
Map A7 Visual Resource Management Analysis



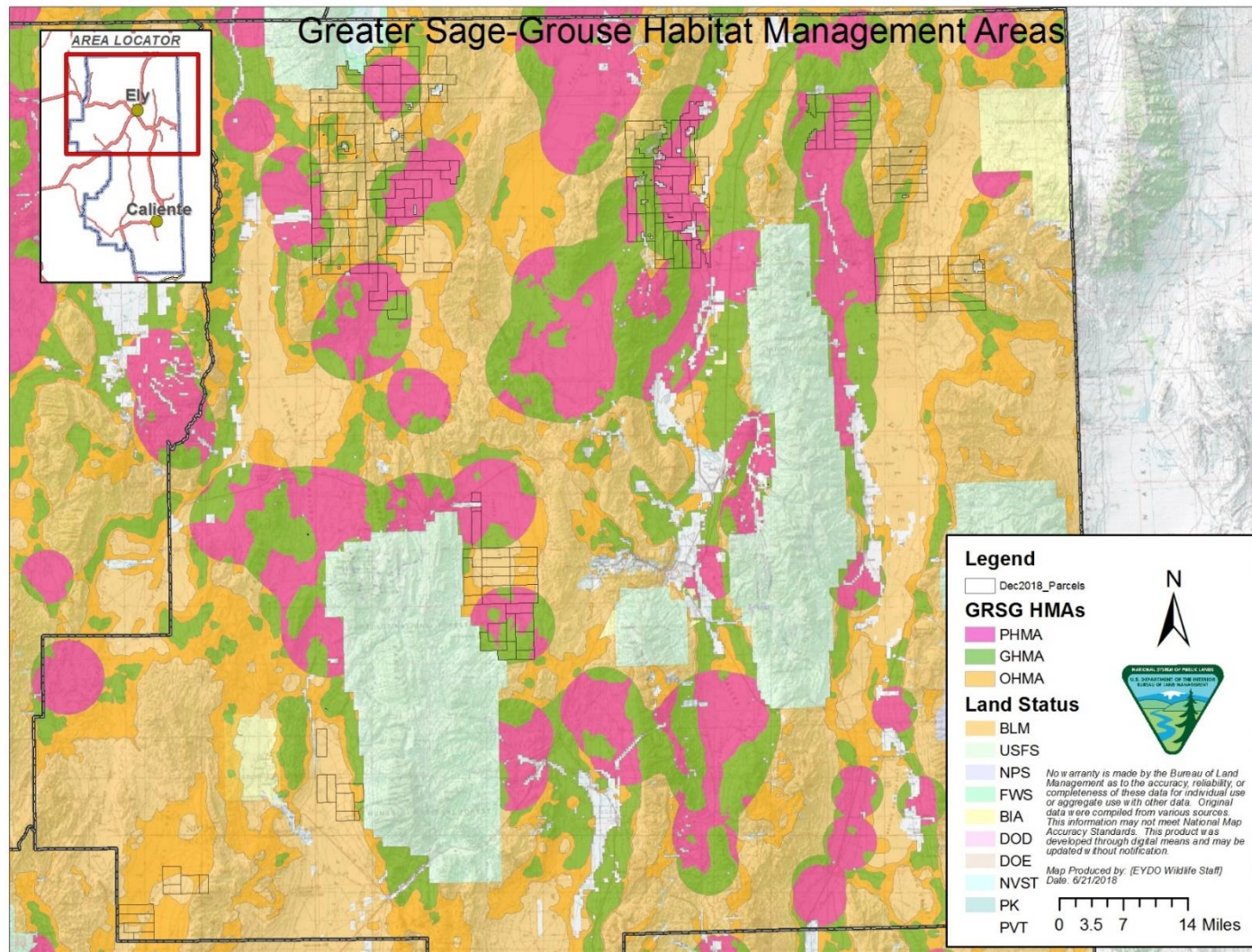
Map A8 Pronghorn Habitat with Stipulations



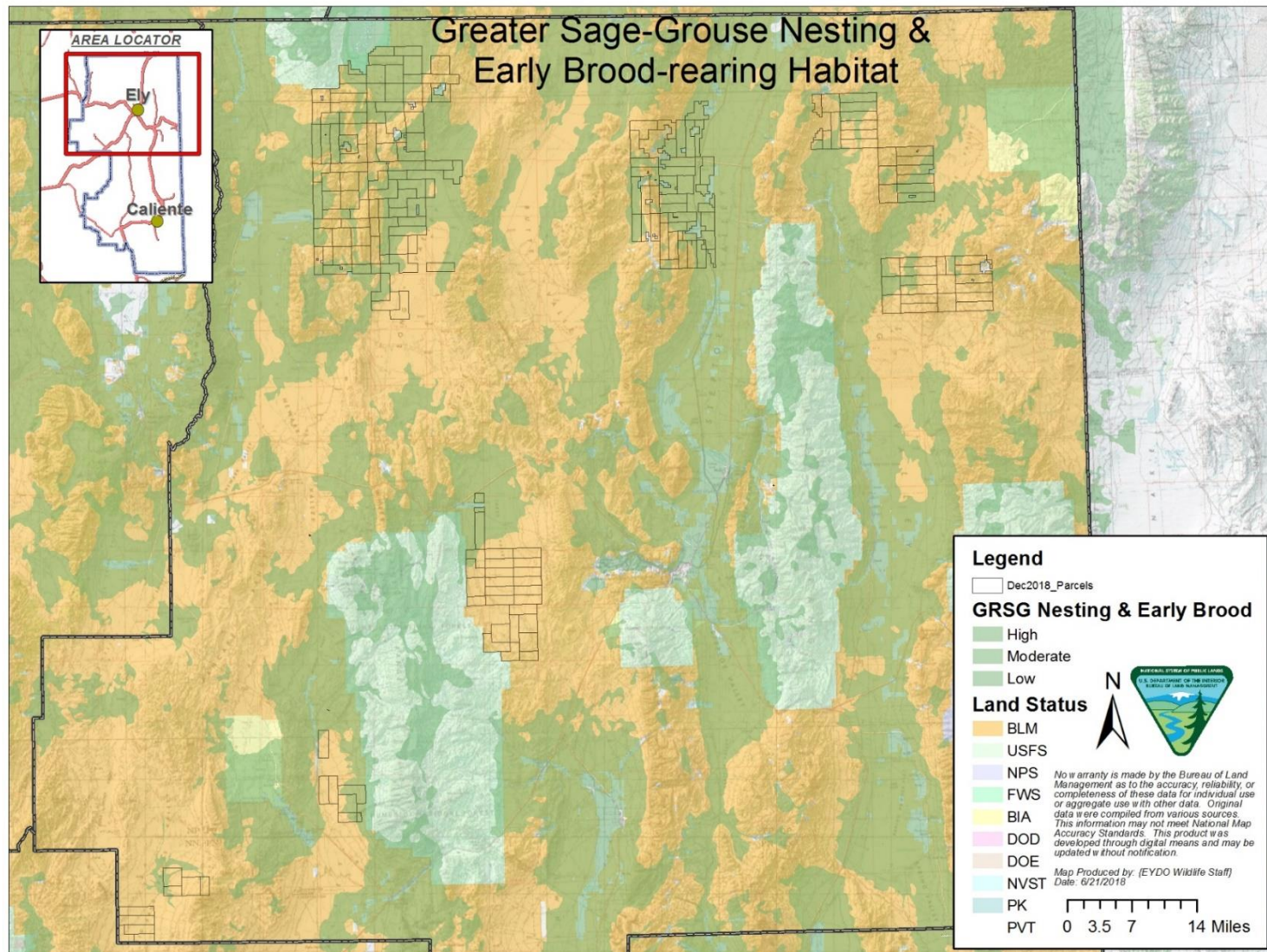
Map A9 Mule Deer Habitat with Stipulations



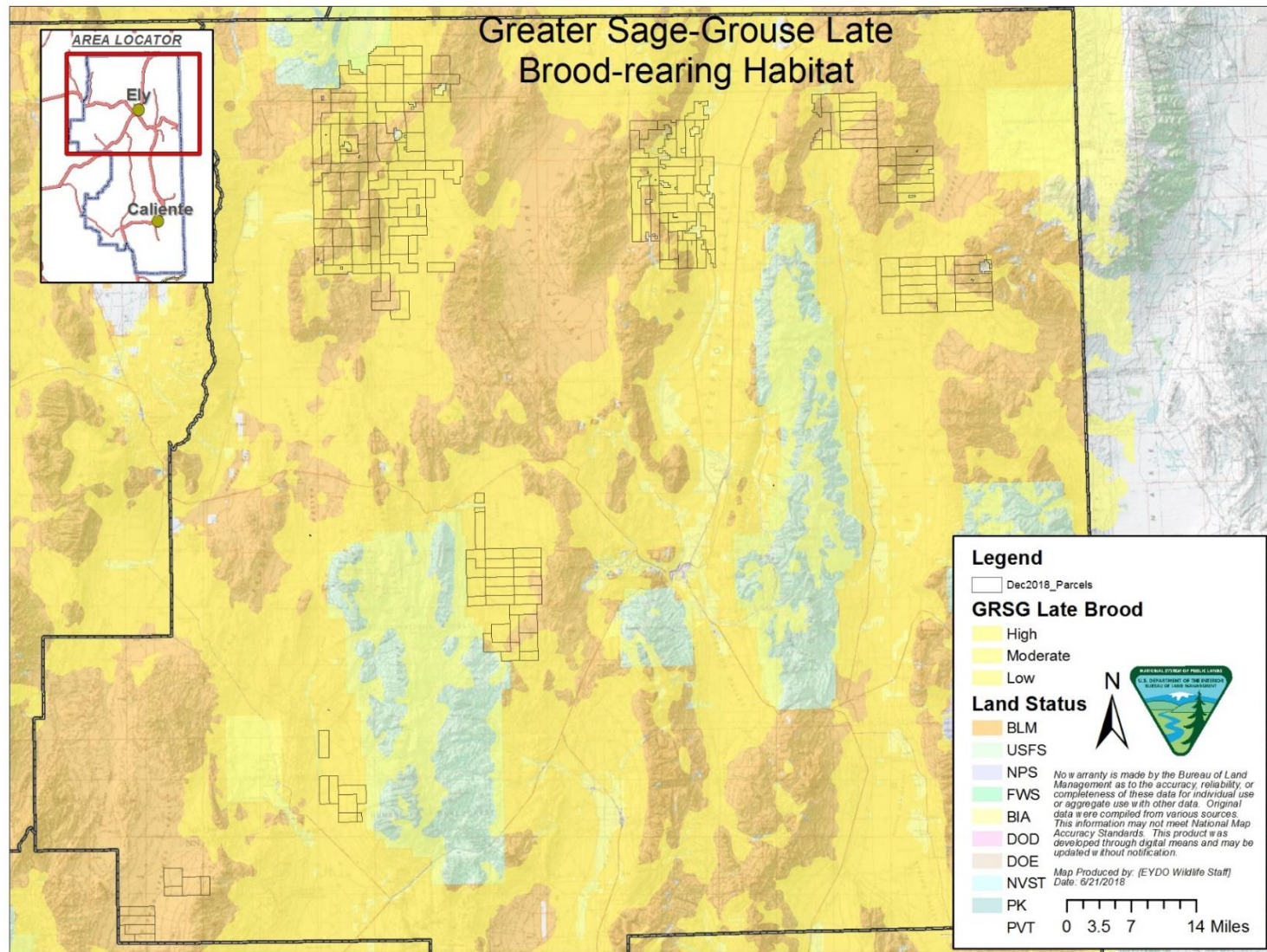
Map A10 Rocky Mountain Elk Habitat with Stipulations



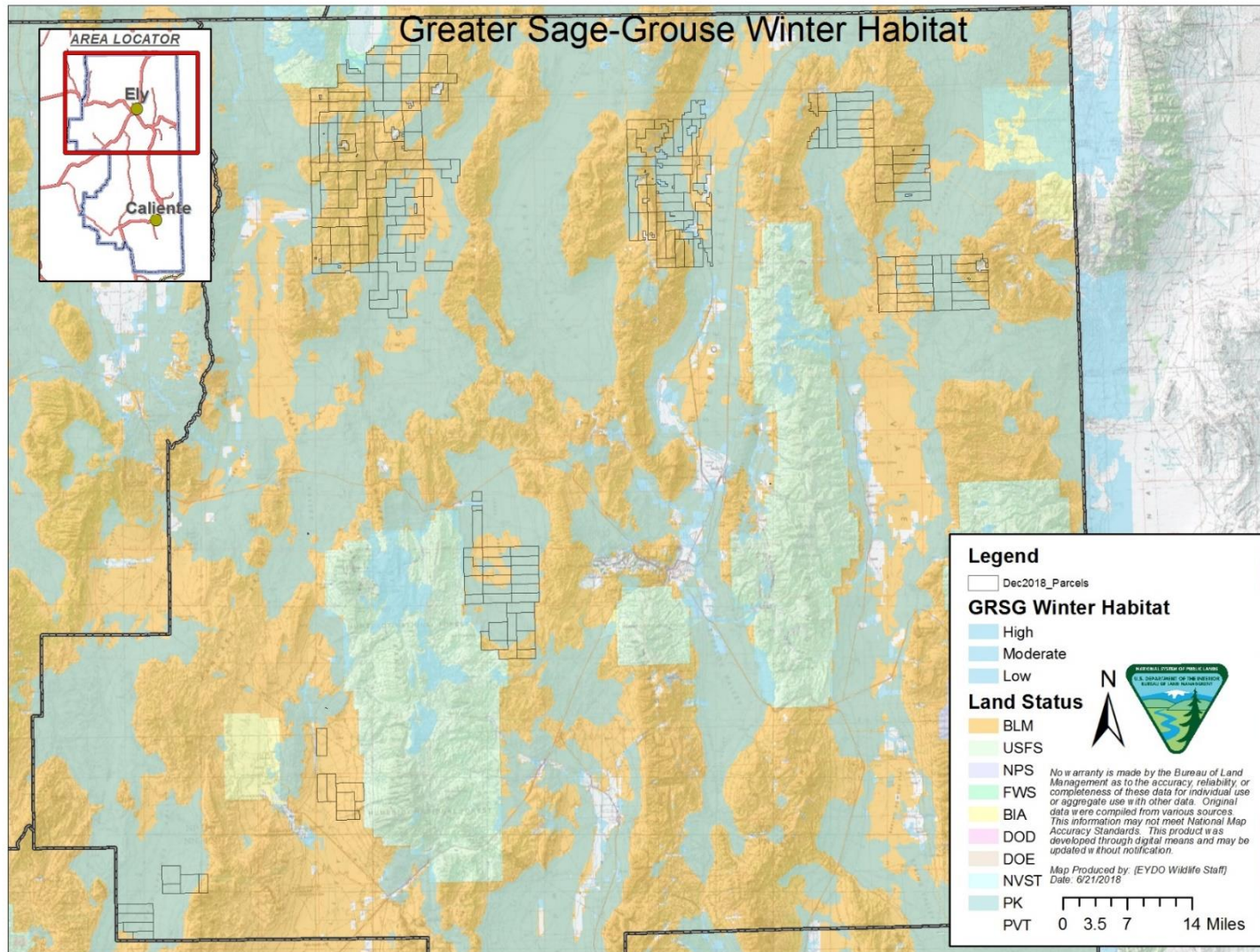
Map A11 Greater Sage-Grouse Habitat Management Area



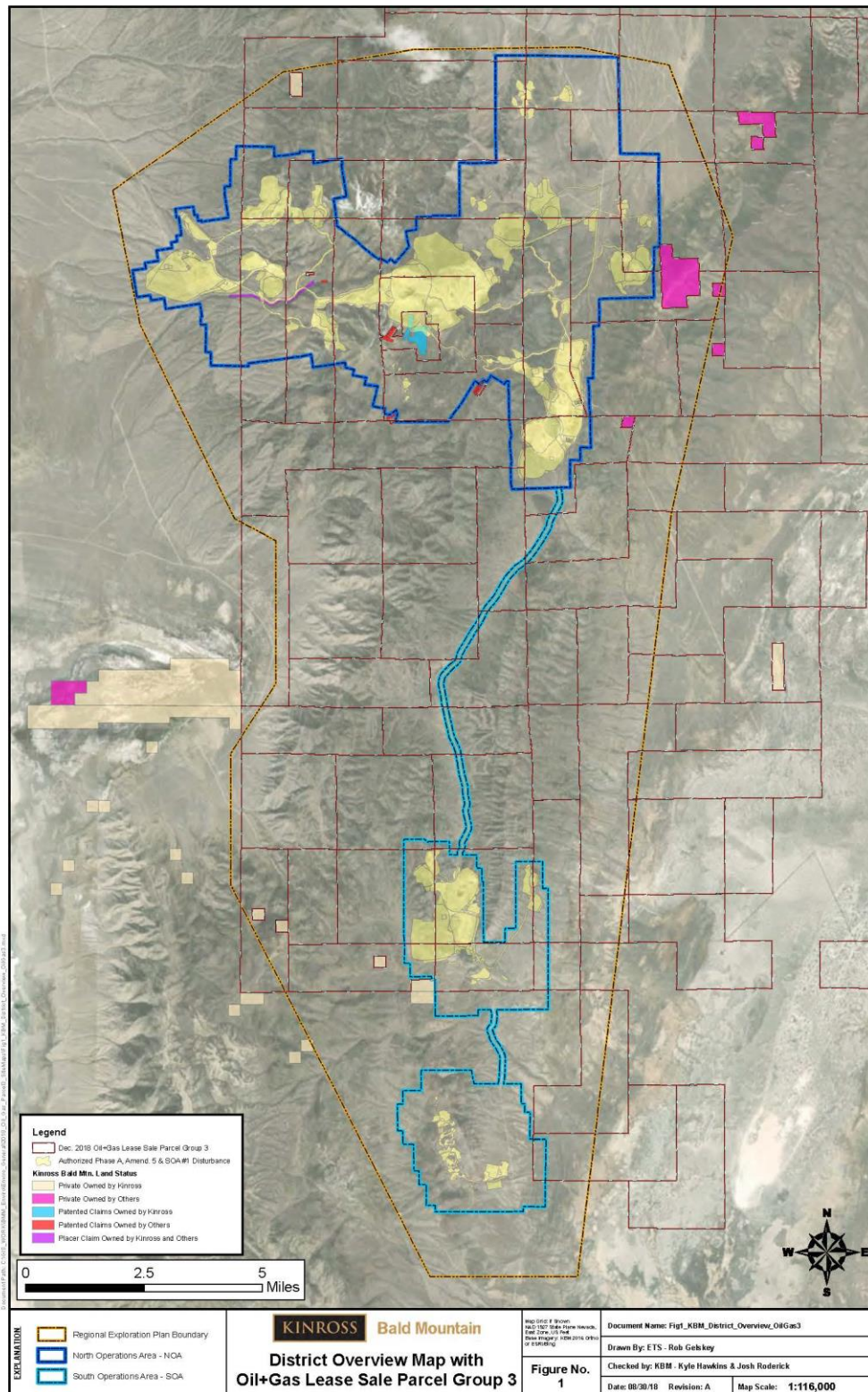
Map A12 Greater Sage-Grouse Nesting and Early Brood-Rearing Habitat



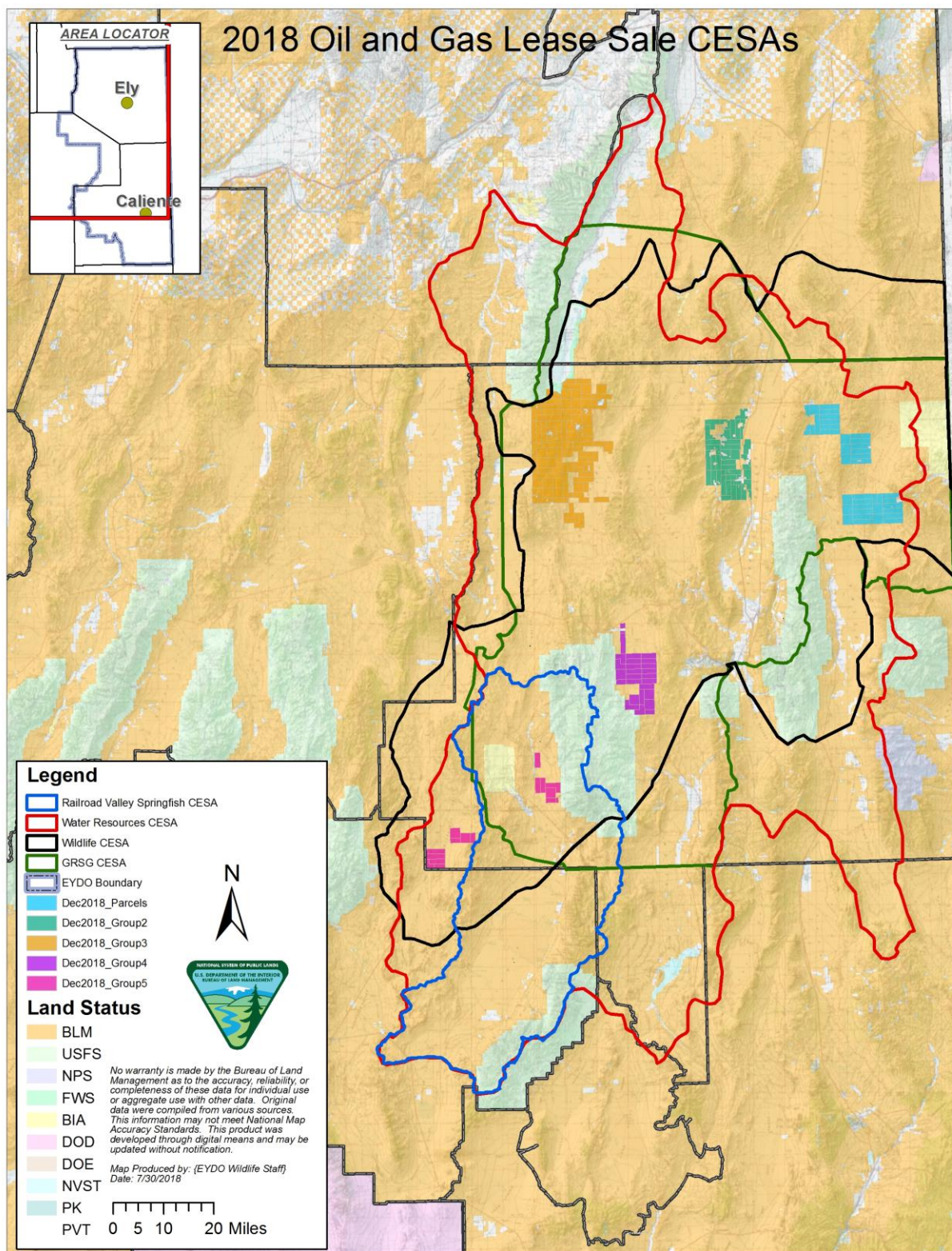
Map A13 Greater Sage-Grouse Late Brood Rearing Habitat



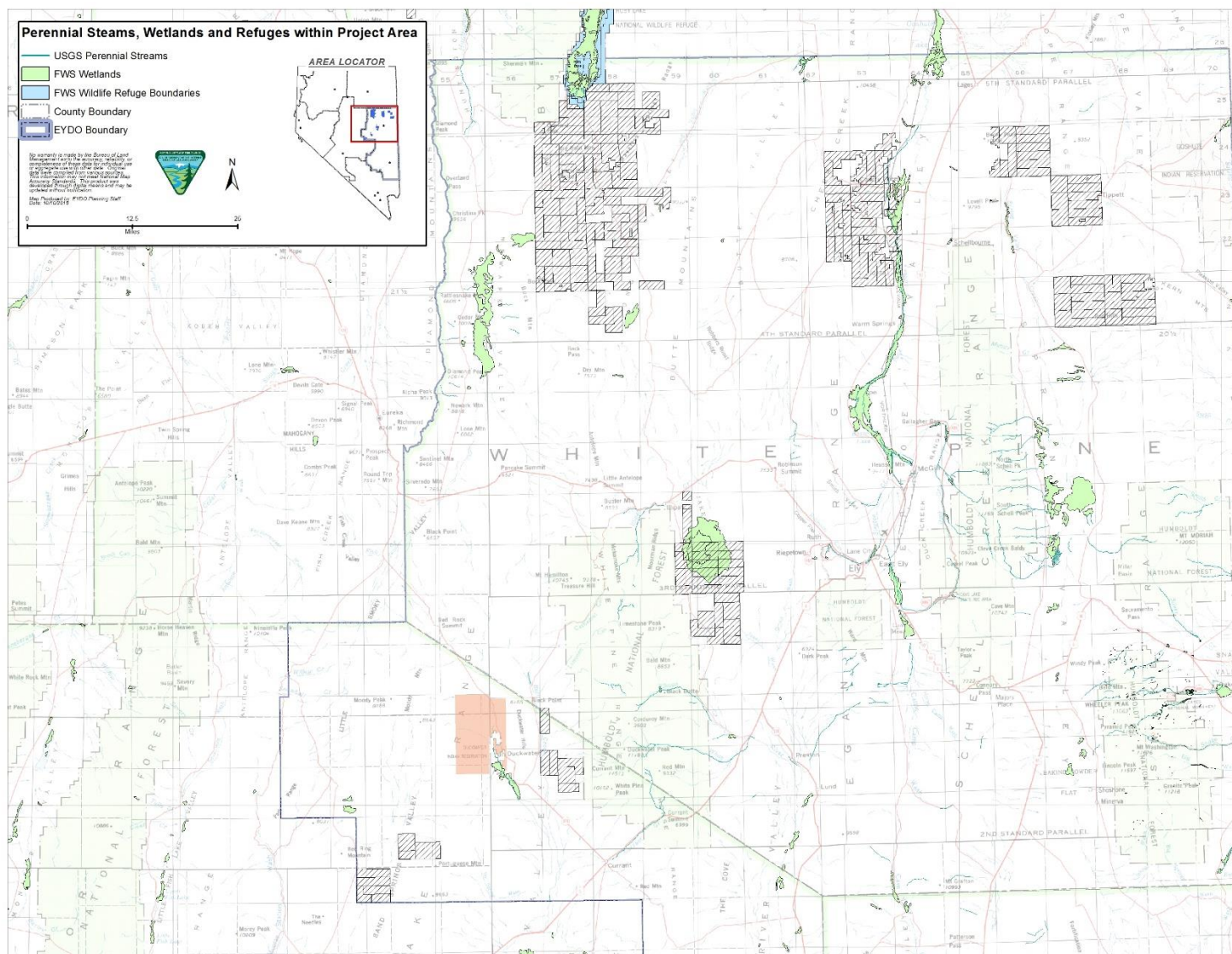
Map A14 Greater Sage-Grouse Winter Habitat



Map A15 Bald Mountain Mine Authorized Plan of Operation



Map A16 Cumulative Effects Study Areas



Map A17 Perennial Streams, Wetlands and Refuges within the Project Area

Appendix B-Supporting Tables

Table B1 BLM Special Status Species by Parcel Group.

Common Name	Scientific Name	Parcel Group				
		1	2	3	4	5
Birds						
Northern goshawk	<i>Accipiter gentilis</i>		X	X		
Golden eagle	<i>Aquila chrysaetos</i>	X	X	X	X	X
Short-eared owl	<i>Asio flammeus</i>	X	X	X	X	X
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	X	X	X	X	X
Ferruginous hawk	<i>Buteo regalis</i>	X	X	X	X	X
Swainson’s hawk	<i>Buteo swainsoni</i>	X	X	X	X	X
Greater sage-grouse	<i>Centrocercus urophasianus</i>	X	X	X	X	X
Peregrine falcon	<i>Falco peregrinus</i>	X	X	X		
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	X	X	X	X	X
Loggerhead shrike	<i>Lanius ludovicianus</i>	X	X	X	X	X
Black rosy-finch	<i>Leucosticte atrata</i>	X	X	X		
Gray-crowned rosy finch	<i>Leucosticte tephrocotis</i>	X	X	X		
Lewis’s woodpecker	<i>Melanerpes lewis</i>	X	X	X	X	X
Long-billed curlew	<i>Numenius americanus</i>	X	X	X	X	X
Sage thrasher	<i>Oreoscoptes montanus</i>	X	X	X	X	X
Brewer’s sparrow	<i>Spizella breweri</i>	X	X	X	X	X
Fish						
Newark Valley tui chub	<i>Gila bicolor newarkensis</i>			X		X
Railroad Valley tui chub	<i>Siphateles bicolor spp.7</i>					X
Relict dace	<i>Relictus solitarius</i>	X	X	X		
Railroad Valley springfish*	<i>Crenichthys nevadae</i>					X
Amphibians						
Northern leopard frog	<i>Lithobates pipiens</i>			X		X
Western toad	<i>Anaxyrus boreas</i>					X
Mammals						
Pallid bat	<i>Antrozous pallidus</i>	X	X	X	X	X
Pygmy rabbit	<i>Brachylagus idahoensis</i>	X	X	X	X	X
Townsend’s big-eared bat	<i>Corynorhinus townsendii</i>	X	X	X	X	X
Big brown bat	<i>Eptesicus fuscus</i>	X	X	X	X	X
Spotted bat	<i>Euderma maculatum</i>	X	X	X	X	X
Silver-haired bat	<i>Lasionycteris noctivagans</i>	X	X	X	X	X
Hoary bat	<i>Lasiurus cinereus</i>	X	X	X	X	X
Dark kangaroo mouse	<i>Microdipodops megacephalus</i>					X
Pale kangaroo mouse	<i>Microdipodops pallidus</i>					X
California myotis	<i>Myotis californicus</i>	X	X	X	X	X
Western small-footed myotis	<i>Myotis ciliolabrum</i>	X	X	X	X	X
Long-eared myotis	<i>Myotis evotis</i>	X	X	X	X	X
Long-legged myotis	<i>Myotis volans</i>	X	X	X	X	X
Big free-tailed bat	<i>Nyctinomops macrotis</i>	X	X	X	X	X
Canyon bat	<i>Pipistrellus hesperus</i>	X	X	X	X	X

Common Name	Scientific Name	Parcel Group				
		1	2	3	4	5
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	X	X	X	X	X
Pocket gopher	<i>Thomomys bottae</i>	X	X	X	X	X
Reptiles						
Great Basin collared lizard	<i>Crotaphytus bicinctores</i>	X	X	X	X	X
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>	X	X	X	X	X
Greater short-horned lizard	<i>Phrynosoma hernandesi</i>					
Desert horned lizard	<i>Phrynosoma platyrhinos</i>	X	X	X	X	X
Molluscs						
Duckwater pyrg	<i>Pyrgulopsis aloba</i>					X
Southern Duckwater pyrg	<i>Pyrgulopsis anatina</i>					X
Big Warm Springs pyrg	<i>Pyrgulopsis papillata</i>					X
Northern Steptoe pyrg	<i>Pyrgulopsis serrata</i>		X			
Insects						
Railroad Valley skipper	<i>Hesperia uncas fulvapalla</i>					X
Plants						
Parish phacelia	<i>Phacelia parishii</i>	X				

* Federally threatened species

Table B2 Lands with Active Locatable Mining Claims within Nominated Parcels

Unit Unique Identifier	Parcel Group	Township (North)	Range (East)	Section(s)	Baseline Meridian
NV-18-12-012	C	22	57	01, 02, 03	Mount Diablo
NV-18-12-013	C	22	57	04, 05, 06	Mount Diablo
NV-18-12-014	C	22	57	07, 08, 17, 18,	Mount Diablo
NV-18-12-015	C	22	57	09, 10, 15, 16	Mount Diablo
NV-18-12-016	C	22	57	19, 30, 31	Mount Diablo
NV-18-12-017	C	22	57	20, 29	Mount Diablo
NV-18-12-018	C	22	57	21, 22, 27	Mount Diablo
NV-18-12-019	C	22	57	23, 24, 25, 26	Mount Diablo
NV-18-12-020	C	22	57	32, 33, 34	Mount Diablo
NV-18-12-021	C	22	57	35, 36	Mount Diablo
NV-18-12-022	C	23	57	01, 02, 03, 04	Mount Diablo
NV-18-12-023	C	23	57	05, 06, 07	Mount Diablo
NV-18-12-024	C	23	57	08, 09, 16, 17	Mount Diablo
NV-18-12-025	C	23	57	10, 11, 14, 15	Mount Diablo
NV-18-12-026	C	23	57	12, 13, 24	Mount Diablo
NV-18-12-027	C	23	57	18, 19, 30, 31	Mount Diablo
NV-18-12-028	C	23	57	20, 21, 28, 29	Mount Diablo
NV-18-12-029	C	23	57	22, 23, 26, 27	Mount Diablo
NV-18-12-030	C	23	57	25, 35, 36	Mount Diablo
NV-18-12-031	C	23	57	32, 33, 34	Mount Diablo
NV-18-12-032	C	24	57	01, 02, 03, 04,	Mount Diablo
NV-18-12-033	C	24	57	05, 06, 07	Mount Diablo
NV-18-12-034	C	24	57	08, 09	Mount Diablo
NV-18-12-035	C	24	57	10, 11, 12	Mount Diablo
NV-18-12-036	C	24	57	13, 14, 15, 24	Mount Diablo
NV-18-12-037	C	24	57	16, 21, 28, 33	Mount Diablo
NV-18-12-038	C	24	57	17, 20, 29, 32	Mount Diablo
NV-18-12-039	C	24	57	18, 19, 30, 31	Mount Diablo
NV-18-12-040	C	24	57	22, 23, 26, 27	Mount Diablo
NV-18-12-041	C	24	57	25, 34, 35, 36	Mount Diablo
NV-18-12-044	C	25	57	25, 26, 27, 28	Mount Diablo
NV-18-12-045	C	25	57	29, 30, 31, 32	Mount Diablo

NV-18-12-046	C	25	57	33, 34, 35, 36	Mount Diablo
NV-18-12-049	C	21	58	05, 08, 17, 18	Mount Diablo
NV-18-12-051	C	21	58	19, 20	Mount Diablo
NV-18-12-054	C	22	58	06, 07	Mount Diablo
NV-18-12-055	C	22	58	09	Mount Diablo
NV-18-12-057	C	22	58	21	Mount Diablo
NV-18-12-058	C	22	58	18, 19, 30	Mount Diablo
NV-18-12-061	C	23	58	03, 04	Mount Diablo
NV-18-12-062	C	23	58	05, 06, 07	Mount Diablo
NV-18-12-063	C	23	58	17, 18, 08	Mount Diablo
NV-18-12-064	C	23	58	09, 10	Mount Diablo
NV-18-12-066	C	23	58	28	Mount Diablo
NV-18-12-068	C	23	58	29, 32	Mount Diablo
NV-18-12-069	C	23	58	30, 31	Mount Diablo
NV-18-12-070	C	23	58	33	Mount Diablo
NV-18-12-072	C	24	58	04, 05	Mount Diablo
NV-18-12-073	C	24	58	06, 07, 08	Mount Diablo
NV-18-12-074	C	24	58	09, 16	Mount Diablo
NV-18-12-076	C	24	58	17, 20, 21	Mount Diablo
NV-18-12-077	C	24	58	18, 19, 30, 31	Mount Diablo
NV-18-12-088	C	25	58	35, 36	Mount Diablo
NV-18-12-089	C	25	58	33, 34	Mount Diablo
NV-18-12-090	C	25	58	29, 30, 31, 32	Mount Diablo
NV-18-12-128	B	23	62	03	Mount Diablo
NV-18-12-131	B	23	62	26	Mount Diablo
NV-18-12-133	B	24	62	14, 23	Mount Diablo
NV-18-12-134	B	24	62	22, 34	Mount Diablo
NV-18-12-153	B	23	63	30	Mount Diablo
NV-18-12-161	A	24	63	30	Mount Diablo
NV-18-12-164	A	24	66	01	Mount Diablo
NV-18-12-172	A	24	66	36	Mount Diablo

Appendix C-Nominated Parcels

NV-18-12-004 2558.000 Acres

T.0100N, R.0530E, 21 MDM, NV
 Sec. 013 PROT ALL;
 014 PROT ALL;
 015 PROT ALL;
 016 PROT E2,E2NW,E2SW;

Nye County

Ely DO

OHMA

NV-18-12-005 2559.000 Acres

T.0100N, R.0530E, 21 MDM, NV
 Sec. 021 PROT E2,E2NW,E2SW;
 022 PROT ALL;
 023 ALL;
 024 ALL;

Nye County

Ely DO

OHMA

NV-18-12-006 2081.000 Acres

T.0100N, R.0530E, 21 MDM, NV
 Sec. 025 PROT ALL;
 026 PROT ALL;
 027 PROT ALL;

Nye County

Ely DO

NV-18-12-007 1600.000 Acres

T.0100N, R.0530E, 21 MDM, NV
 Sec. 028 PROT E2,E2NW,E2SW;
 033 PROT E2,E2NW,E2SW;
 034 PROT ALL;

Nye County

Ely DO

OHMA

NV-18-12-008 1442.000 Acres

T.0100N, R.0530E, 21 MDM, NV
 Sec. 035 PROT ALL;
 036 PROT ALL;

Nye County

Ely DO

NV-18-12-012 1924.780 Acres

T.0220N, R.0570E, 21 MDM, NV
 Sec. 001 LOTS 1-4;
 001 S2NE,S2NW,S2;
 002 LOTS 1-4;
 002 S2NE,S2NW,S2;
 003 LOTS 1-4;
 003 S2NE,S2NW,S2;

White Pine County

Ely DO

OHMA

NV-18-12-013 1918.270 Acres

T.0220N, R.0570E, 21 MDM, NV
 Sec. 004 LOTS 1-4;
 004 S2NE,S2NW,S2;
 005 LOTS 1-4;
 005 S2NE,S2NW,S2;
 006 LOTS 1-7;
 006 S2NE,SENW,E2SW,SE;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-014 2541.300 Acres

T.0220N, R.0570E, 21 MDM, NV
 Sec. 007 LOTS 1-4;
 007 E2,E2NW,E2SW;
 008 ALL;
 017 ALL;
 018 LOTS 1-4;
 018 E2,E2NW,E2SW;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-015 2560.000 Acres

T.0220N, R.0570E, 21 MDM, NV
 Sec. 009 ALL;
 010 ALL;
 015 ALL;
 016 ALL;

White Pine County

Ely DO

OHMA,GHMA

NV-18-12-016 1822.120 Acres

T.0220N, R.0570E, 21 MDM, NV
 Sec. 019 LOTS 1-4;
 019 E2,E2NW,E2SW;
 030 LOTS 1-4;
 030 NE,NENW,E2SW,W2SE,SESE;
 031 LOTS 1-4;
 031 E2,E2NW,E2SW;

White Pine County

Ely DO

OHMA,GHMA

NV-18-12-017 1280.000 Acres

T.0220N, R.0570E, 21 MDM, NV
 Sec. 020 ALL;

029 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-018 2560.000 Acres

T.0220N, R.0570E, 21 MDM, NV
Sec. 021 ALL;
022 ALL;
027 ALL;
028 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-019 2560.000 Acres

T.0220N, R.0570E, 21 MDM, NV
Sec. 023 ALL;
024 ALL;
025 ALL;
026 ALL;
White Pine County
Ely DO

NV-18-12-020 1800.000 Acres

T.0220N, R.0570E, 21 MDM, NV
Sec. 032 ALL;
033 N2NE,SWNE,NW,S2;
034 NE,W2,N2SE;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-021 1280.000 Acres

T.0220N, R.0570E, 21 MDM, NV
Sec. 035 ALL;
036 ALL;
White Pine County
Ely DO
PHMA,OHMA

NV-18-12-022 2556.180 Acres

T.0230N, R.0570E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-4;
002 S2NE,S2NW,S2;
003 LOTS 1,2,5,6;
003 S2NE,S2NW,S2;
004 LOTS 1-4;
004 S2NE,S2NW,S2;
White Pine County
Ely DO
MS3136

NV-18-12-023 1893.030 Acres

T.0230N, R.0570E, 21 MDM, NV

Sec. 005 LOTS 1-4;
005 S2NE,S2NW,S2;
006 LOTS 1-7;
006 S2NE,SENE,E2SW,SE;
007 LOTS 1-4;
007 E2,E2NW,E2SW;

White Pine County
Ely DO
PHMA,GHMA

NV-18-12-024 2560.000 Acres

T.0230N, R.0570E, 21 MDM, NV
Sec. 008 ALL;
009 ALL;
016 ALL;
017 ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-025 2560.000 Acres

T.0230N, R.0570E, 21 MDM, NV
Sec. 010 ALL;
011 ALL;
014 ALL;
015 ALL;
White Pine County
Ely DO

NV-18-12-026 1920.000 Acres

T.0230N, R.0570E, 21 MDM, NV
Sec. 012 ALL;
013 ALL;
024 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-027 2511.480 Acres

T.0230N, R.0570E, 21 MDM, NV
Sec. 018 LOTS 1-4;
018 E2,E2NW,E2SW;
019 LOTS 1-4;
019 E2,E2NW,E2SW;
030 LOTS 1-4;
030 E2,E2NW,E2SW;
031 LOTS 1-4;
031 E2,E2NW,E2SW;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-028 2560.000 Acres

T.0230N, R.0570E, 21 MDM, NV
Sec. 020 ALL;
021 ALL;

028 ALL;
029 ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-029 2560.000 Acres
T.0230N, R.0570E, 21 MDM, NV
Sec. 022 ALL;
023 ALL;
026 ALL;
027 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-030 1920.000 Acres
T.0230N, R.0570E, 21 MDM, NV
Sec. 025 ALL;
035 ALL;
036 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-031 1920.000 Acres
T.0230N, R.0570E, 21 MDM, NV
Sec. 032 ALL;
033 ALL;
034 ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-032 2559.220 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-4;
002 S2NE,S2NW,S2;
003 LOTS 1-4;
003 S2NE,S2NW,S2;
004 LOTS 1-4;
004 S2NE,S2NW,S2;
White Pine County
Ely DO
OHMA

NV-18-12-033 1880.990 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 005 LOTS 1-4;
005 S2NE,S2NW,S2;
006 LOTS 1-7;
006 S2NE,SENE,E2SW,SE;
007 LOTS 1-4;
007 E2,E2NW,E2SW;

White Pine County
Ely DO
OHMA

NV-18-12-034 1280.000 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 008 ALL;
009 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-035 1920.000 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 010 ALL;
011 ALL;
012 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-036 2560.000 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 013 ALL;
014 ALL;
015 ALL;
024 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-037 2560.000 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 016 ALL;
021 ALL;
028 ALL;
033 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-038 2555.000 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 017 LOTS 1-2;
017 N2,N2SW,SWSW,N2SE,SESE;
020 ALL;
029 ALL;
032 ALL;
White Pine County
Ely DO
OHMA,GHMA
EXCEPT MS 1585B PATENT8279

NV-18-12-039 2485.360 Acres
T.0240N, R.0570E, 21 MDM, NV

Sec. 018 LOTS 1-4;
018 E2,E2NW,E2SW;
019 LOTS 1-4;
019 E2,E2NW,E2SW;
030 LOTS 1-4;
030 E2,E2NW,E2SW;
031 LOTS 1-4;
031 E2,E2NW,E2SW;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-040 2128.800 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 022 N2,SW,N2SE;
023 ALL;
026 E2,E2NW,NESW,S2SW;
027 LOTS 1-2;
027 SW,W2SE,SESE;
White Pine County
Ely DO
OHMA,GHMA
MS 5122
MS 3860 PATENT257006

NV-18-12-041 2502.762 Acres
T.0240N, R.0570E, 21 MDM, NV
Sec. 025 ALL;
034 ALL;EXCEPT MS3136
035 LOTS 1;
035 N2NE,SWNE,W2,SE;
036 LOTS 1;
036 E2,E2NW,SW;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-042 600.000 Acres
T.0250N, R.0570E, 21 MDM, NV
Sec. 011 W2SW;
013 W2SW,SESW;
014 W2NW,S2;
White Pine County
Ely DO
GHMA

NV-18-12-043 2560.000 Acres
T.0250N, R.0570E, 21 MDM, NV
Sec. 015 ALL;
022 ALL;
023 ALL;
024 ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-044 2240.000 Acres
T.0250N, R.0570E, 21 MDM, NV
Sec. 025 ALL;
026 ALL;
027 ALL;
028 S2;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-045 1809.930 Acres
T.0250N, R.0570E, 21 MDM, NV
Sec. 029 S2;
030 LOTS 3-4;
030 SE,E2SW;
031 LOTS 1-4;
031 E2,E2NW,E2SW;
032 E2,N2NW,SENW,E2SW,SWSW;
White Pine County
Ely DO

NV-18-12-046 2560.000 Acres
T.0250N, R.0570E, 21 MDM, NV
Sec. 033 ALL;
034 ALL;
035 ALL;
036 ALL;
White Pine County
Ely DO
GHMA

NV-18-12-049 2559.700 Acres
T.0210N, R.0580E, 21 MDM, NV
Sec. 005 LOTS 1-4;
005 S2NE,S2NW,S2;
008 ALL;
017 ALL;
018 LOTS 1-4;
018 E2,E2NW,E2SW;
White Pine County
Ely DO
PHMA

NV-18-12-050 2560.000 Acres
T.0210N, R.0580E, 21 MDM, NV
Sec. 015 ALL;
022 ALL;
027 ALL;
028 ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-051 2557.820 Acres
T.0210N, R.0580E, 21 MDM, NV
Sec. 016 ALL;

019 LOTS 1-4;
019 E2,E2NW,E2SW;
020 ALL;
021 ALL;

White Pine County
Ely DO
PHMA,GHMA
N-40152

NV-18-12-053 1917.120 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-4;
002 S2NE,S2NW,S2;
003 LOTS 1-4;
003 S2NE,S2NW,S2;

White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-054 1251.400 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 006 LOTS 1-7;
006 S2NE,SENE,E2SW,SE;
007 LOTS 1-4;
007 E2,E2NW,E2SW;

White Pine County
Ely DO

NV-18-12-055 2560.000 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 009 ALL;
010 ALL;
011 ALL;
012 ALL;

White Pine County
Ely DO
GHMA, OHMA

NV-18-12-056 1280.000 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 014 ALL;
023 ALL;

White Pine County
Ely DO

NV-18-12-057 2560.000 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 015 ALL;
016 ALL;
021 ALL;
022 ALL;

White Pine County
Ely DO
GHMA, OHMA

NV-18-12-058 1889.980 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 018 LOTS 1-4;
018 E2,E2NW,E2SW;
019 LOTS 1-4;
019 E2,E2NW,E2SW;
030 LOTS 1-4;
030 E2,E2NW,E2SW;

White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-059 2560.000 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 027 ALL;
028 ALL;
034 ALL;
035 ALL;

White Pine County
Ely DO
PHMA,GHMA,OHMA

NV-18-12-060 1272.720 Acres

T.0220N, R.0580E, 21 MDM, NV

Sec. 029 ALL;
031 LOTS 1-4;
031 E2,E2NW,E2SW;

White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-061 2554.320 Acres

T.0230N, R.0580E, 21 MDM, NV

Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-4;
002 S2NE,S2NW,S2;
003 LOTS 1-4;
003 S2NE,S2NW,S2;
004 LOTS 1-4;
004 S2NE,S2NW,S2;

White Pine County
Ely DO
PHMA,GHMA

NV-18-12-062 2118.650 Acres

T.0230N, R.0580E, 21 MDM, NV

Sec. 005 LOTS 5-19;
006 LOTS 8-23;
007 LOTS 5-20;

White Pine County
Ely DO
OHMA

NV-18-12-063 2114.600 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 017 LOTS 1-16;
018 LOTS 5-20;
008 LOTS 1-16;
White Pine County
Ely DO

NV-18-12-064 1280.000 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 009 ALL;
010 ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-065 2560.000 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 013 ALL;
014 ALL;
015 ALL;
024 ALL;
White Pine County
Ely DO
PHMA

NV-18-12-066 2560.000 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 022 ALL;
023 ALL;
027 ALL;
028 ALL;
White Pine County
Ely DO
PHMA

NV-18-12-067 2400.000 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 025 N2,N2SW,SESW,SE;
026 ALL;
035 ALL;
036 NE,E2NW,NESW,S2SW,SE;
White Pine County
Ely DO
PHMA

NV-18-12-068 1415.510 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 029 LOTS 1-16;
032 LOTS 1-16;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-069 1361.440 Acres

T.0230N, R.0580E, 21 MDM, NV

Sec. 030 LOTS 5-20;
031 LOTS 5-20;
White Pine County
Ely DO
GHMA

NV-18-12-070 1299.140 Acres

T.0230N, R.0580E, 21 MDM, NV
Sec. 033 LOTS 1-8;
033 E2;
034 ALL;
White Pine County
Ely DO
PHMA

NV-18-12-071 1081.850 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 001 LOTS 1-3;
001 S2NE,SESW,S2;
002 LOTS 3-4;
002 S2NW,S2NE,SW,W2SE,SESE;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-072 1928.120 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 003 LOTS 1-4;
003 S2NE,S2NW,S2;
004 LOTS 1-4;
004 S2NE,S2NW,S2;
005 LOTS 1-4;
005 S2NE,S2NW,S2;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-073 1882.290 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 006 LOTS 1-7;
006 S2NE,SESW,E2SW,SE;
007 LOTS 1-4;
007 E2,E2NW,E2SW;
008 ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-074 2400.000 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 009 ALL;
010 ALL;
015 N2,N2SW,SE;
016 N2,SW,W2SE;
White Pine County
Ely DO

PHMA,OHMA,GHMA

NV-18-12-075 2560.000 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 011 ALL;
012 ALL;
013 ALL;
014 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-076 2200.000 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 017 ALL;
020 ALL;
021 W2NE,W2,W2SE,SESE;
022 N2NE,SWNE,NESW,S2SW,SE;
White Pine County
Ely DO
OHMA

NV-18-12-077 2502.200 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 018 LOTS 1-4;
018 E2,E2NW,E2SW;
019 LOTS 1-4;
019 E2,E2NW,E2SW;
030 LOTS 1-4;
030 E2,E2NW,E2SW;
031 LOTS 1-4;
031 E2,E2NW,E2SW;
White Pine County
Ely DO
OHMA

NV-18-12-078 2560.000 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 023 ALL;
024 ALL;
025 ALL;
026 ALL;
White Pine County
Ely DO

NV-18-12-079 2520.000 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 027 N2,SW,W2SE,SESE;
034 ALL;
035 ALL;
036 ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-080 2560.000 Acres

T.0240N, R.0580E, 21 MDM, NV
Sec. 028 ALL;
029 ALL;
032 ALL;
033 ALL;
White Pine County
Ely DO
GHMA

NV-18-12-081 1931.580 Acres

T.0250N, R.0580E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-4;
002 S2NE,S2NW,S2;
003 LOTS 1-4;
003 S2NE,S2NW,S2;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-082 1523.530 Acres

T.0250N, R.0580E, 21 MDM, NV
Sec. 004 LOTS 1-4;
004 S2NE,S2NW,S2;
005 LOTS 1-4;
005 S2NE,S2NW,S2;
006 SENE,SESW,SE;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-083 2400.000 Acres

T.0250N, R.0580E, 21 MDM, NV
Sec. 007 E2,E2NW,E2SW;
008 ALL;
009 ALL;
010 ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-084 2560.000 Acres

T.0250N, R.0580E, 21 MDM, NV
Sec. 011 ALL;
012 ALL;
013 ALL;
014 ALL;
White Pine County
Ely DO
PHMA,OHMA

NV-18-12-085 2560.000 Acres

T.0250N, R.0580E, 21 MDM, NV
Sec. 015 ALL;

016 ALL;
 021 ALL;
 022 ALL;
 White Pine County
 Ely DO
 PHMA

NV-18-12-086 2516.640 Acres
 T.0250N, R.0580E, 21 MDM, NV
 Sec. 017 ALL;
 018 LOTS 1-4;
 018 E2,E2NW,E2SW;
 019 LOTS 1-4;
 019 E2,E2NW,E2SW;
 020 ALL;
 White Pine County
 Ely DO
 PHMA

NV-18-12-087 1280.000 Acres
 T.0250N, R.0580E, 21 MDM, NV
 Sec. 023 ALL;
 024 ALL;
 White Pine County
 Ely DO
 PHMA

NV-18-12-088 2560.000 Acres
 T.0250N, R.0580E, 21 MDM, NV
 Sec. 025 PROT ALL;
 026 PROT ALL;
 035 PROT ALL;
 036 PROT ALL;
 White Pine County
 Ely DO
 PHMA,GHMA

NV-18-12-089 2560.000 Acres
 T.0250N, R.0580E, 21 MDM, NV
 Sec. 027 ALL;
 028 ALL;
 033 ALL;
 034 ALL;
 White Pine County
 Ely DO
 PHMA

NV-18-12-090 2521.120 Acres
 T.0250N, R.0580E, 21 MDM, NV
 Sec. 029 ALL;
 030 LOTS 1-4;
 030 E2,E2NW,E2SW;
 031 LOTS 1-4;
 031 E2,E2NW,E2SW;
 032 ALL;
 White Pine County

Ely DO
 PHMA,GHMA

NV-18-12-091 1921.080 Acres
 T.0160N, R.0590E, 21 MDM, NV
 Sec. 001 LOTS 1-4;
 001 S2NE,S2NW,S2;
 002 LOTS 1-4;
 002 S2NE,S2NW,S2;
 012 ALL;
 White Pine County
 Ely DO
 GHMA, OHMA

NV-18-12-092 1920.000 Acres
 T.0160N, R.0590E, 21 MDM, NV
 Sec. 011 ALL;
 013 ALL;
 014 ALL;
 White Pine County
 Ely DO
 GHMA, OHMA
 N-7732

NV-18-12-093 2560.000 Acres
 T.0160N, R.0590E, 21 MDM, NV
 Sec. 023 ALL;
 024 ALL;
 025 ALL;
 026 ALL;
 White Pine County
 Ely DO
 GHMA, OHMA
 N-56341

NV-18-12-094 1280.000 Acres
 T.0160N, R.0590E, 21 MDM, NV
 Sec. 035 ALL;
 036 ALL;
 White Pine County
 Ely DO
 PHMA, OHMA
 N-56341

NV-18-12-095 959.360 Acres
 T.0170N, R.0590E, 21 MDM, NV
 Sec. 001 LOTS 1-4;
 001 S2NE,S2NW,S2;
 012 S2;
 White Pine County
 Ely DO
 PHMA

NV-18-12-096 2560.000 Acres

T.0170N, R.0590E, 21 MDM, NV
Sec. 013 ALL;
024 ALL;
025 ALL;
036 ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-097 1915.680 Acres

T.0220N, R.0590E, 21 MDM, NV
Sec. 031 LOTS 1-4;
031 E2,E2NW,E2SW;
032 ALL;
033 ALL;
White Pine County
Ely DO
OHMA
N-40149

NV-18-12-098 2120.070 Acres

T.0230N, R.0590E, 21 MDM, NV
Sec. 003 LOTS 1-4;
003 S2NE,S2NW,S2;
009 ALL;
010 NE,W2,W2SE,NESE;
015 W2NE,NW;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-099 1905.800 Acres

T.0230N, R.0590E, 21 MDM, NV
Sec. 004 LOTS 1-4;
004 S2NE,S2NW,S2;
005 LOTS 1-4;
005 S2NE,S2NW,S2;
006 LOTS 1-7;
006 S2NE,SENW,E2SW,SE;
White Pine County
Ely DO
PHMA

NV-18-12-100 1254.960 Acres

T.0230N, R.0590E, 21 MDM, NV
Sec. 018 LOTS 1-4;
018 E2,E2NW,E2SW;
019 LOTS 1-4;
019 E2,E2NW,E2SW;
White Pine County
Ely DO
PHMA

NV-18-12-101 2560.000 Acres

T.0250N, R.0590E, 21 MDM, NV

Sec. 008 ALL;
009 ALL;
016 ALL;
017 ALL;

White Pine County
Ely DO
OHMA

NV-18-12-102 2536.320 Acres

T.0250N, R.0590E, 21 MDM, NV
Sec. 019 LOTS 1-4;
019 E2,E2NW,E2SW;
020 ALL;
021 ALL;
022 ALL;
White Pine County
Ely DO

NV-18-12-103 1840.000 Acres

T.0250N, R.0590E, 21 MDM, NV
Sec. 028 E2,SESW;
029 N2NE,SWNE,NW,W2SW;
032 S2NE,NWNW,S2NW,S2;
033 E2,E2NW,SWNW,SW;
White Pine County
Ely DO
OHMA

NV-18-12-104 1234.160 Acres

T.0250N, R.0590E, 21 MDM, NV
Sec. 030 LOTS 1-4;
030 E2,E2NW,E2SW;
031 LOTS 1-4;
031 E2,E2NW,E2SW;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-105 2136.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 001 PROT ALL;
002 PROT ALL;
003 PROT ALL;
White Pine County
Ely DO
PHMA

NV-18-12-106 1920.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 010 PROT ALL;
015 PROT ALL;
022 PROT ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-107 2560.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 011 PROT ALL;
012 PROT ALL;
013 PROT ALL;
014 PROT ALL;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-108 2560.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 016 PROT ALL;
017 PROT ALL;
020 PROT ALL;
021 PROT ALL;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-109 2560.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 019 PROT ALL;
028 PROT ALL;
029 PROT ALL;
030 PROT ALL;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-110 2560.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 023 PROT ALL;
024 PROT ALL;
025 PROT ALL;
026 PROT ALL;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-111 1920.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 027 PROT ALL;
033 PROT ALL;
034 PROT ALL;
White Pine County
Ely DO
GHMA

NV-18-12-112 1280.000 Acres

T.0150N, R.0600E, 21 MDM, NV
Sec. 035 PROT ALL;
036 PROT ALL;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-113 2098.140 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 001 LOTS 1-11;
001 SWNE, S2NW, SW, W2SE;
002 LOTS 1-8;
002 S2NE, S2NW, S2;
003 LOTS 1-8;
003 S2NE, S2NW, S2;
White Pine County
Ely DO
OHMA

NV-18-12-114 2132.660 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 004 LOTS 1-8;
004 S2NE, S2NW, S2;
005 LOTS 1-8;
005 S2NE, S2NW, S2;
006 LOTS 1-16;
006 S2NE, SENW, E2SW, SE;
White Pine County
Ely DO
GHMA

NV-18-12-115 1963.760 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 007 LOTS 1-8;
007 E2, E2NW, E2SW;
008 ALL;
009 ALL;
White Pine County
Ely DO

NV-18-12-116 1938.080 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 010 ALL;
011 ALL;
012 LOTS 1-4;
012 W2NE, W2, W2SE;
White Pine County
Ely DO
OHMA
N-56342

NV-18-12-117 1934.040 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 013 LOTS 1-4;
013 W2NE, W2, W2SE;
014 ALL;
015 ALL;
White Pine County
Ely DO
OHMA
N-56342

NV-18-12-118 1968.280 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 016 ALL;
017 ALL;
018 LOTS 1-8;
018 E2,E2NW,E2SW;
White Pine County
Ely DO

NV-18-12-119 1972.920 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 019 LOTS 1-8;
019 E2,E2NW,E2SW;
020 ALL;
021 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-120 1930.120 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 022 ALL;
023 ALL;
024 LOTS 1-4;
024 W2NE,W2,W2SE;
White Pine County
Ely DO
OHMA
NVN-56342

NV-18-12-121 1926.560 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 025 LOTS 1-4;
025 W2NE,W2,W2SE;
026 ALL;
027 ALL;
White Pine County
Ely DO
PHMA,OHMA
NVN-56342

NV-18-12-122 1977.600 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 028 ALL;
029 ALL;
030 LOTS 1-8;
030 E2,E2NW,E2SW;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-123 1980.320 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 031 LOTS 1-8;
031 E2,E2NW,E2SW;
032 ALL;

033 ALL;
White Pine County
Ely DO
PHMA,GHMA
N-40144

NV-18-12-124 1922.480 Acres

T.0160N, R.0600E, 21 MDM, NV
Sec. 034 ALL;
035 ALL;
036 LOTS 1-4;
036 W2NE,W2,W2SE;
White Pine County
Ely DO
PHMA, GHMA
N-56342

NV-18-12-125 1837.040 Acres

T.0220N, R.0620E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
012 ALL;
013 NE,N2NW,SWNW;
013 SW,S2SE,NESE;
White Pine County
Ely DO
GHMA

NV-18-12-126 1718.240 Acres

T.0220N, R.0620E, 21 MDM, NV
Sec. 002 LOTS 1-4;
002 S2NE,S2NW,S2;
011 ALL;
014 E2NE,W2,SWSE;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-127 1917.000 Acres

T.0220N, R.0620E, 21 MDM, NV
Sec. 003 LOTS 1-4;
003 S2NE,S2NW,S2;
010 ALL;
015 ALL;
White Pine County
Ely DO
PHMA

NV-18-12-128 1918.640 Acres

T.0230N, R.0620E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-4;
002 S2NE,S2NW,S2;
003 LOTS 1-4;
003 S2NE,S2NW,S2;

White Pine County
Ely DO
PHMA,GHMA

NV-18-12-129 2502.630 Acres

T.0230N, R.0620E, 21 MDM, NV

Sec. 010 ALL;
011 LOTS 1-5;
011 N2NE,SWNE,NW,SW,NWSE;
012 LOTS 1;
012 N2,N2SW,SE;
013 LOTS 1-2;
013 N2NE,SENE,E2NW,SWNW,S2;

White Pine County
Ely DO

NV-18-12-130 2440.000 Acres

T.0230N, R.0620E, 21 MDM, NV

Sec. 015 NE,W2,W2SE;
022 NWNE,S2NE,NW,S2;
027 ALL;
034 ALL;

White Pine County
Ely DO
PHMA

NV-18-12-131 1760.000 Acres

T.0230N, R.0620E, 21 MDM, NV

Sec. 023 ALL;
026 N2,SW;
035 ALL;

White Pine County
Ely DO

NV-18-12-132 1880.000 Acres

T.0230N, R.0620E, 21 MDM, NV

Sec. 024 ALL;
025 N2,NESW,S2SW,SE;
036 ALL;

White Pine County
Ely DO

NV-18-12-133 2560.000 Acres

T.0240N, R.0620E, 21 MDM, NV

Sec. 013 ALL;
014 ALL;
015 ALL;
023 ALL;

White Pine County
Ely DO
OHMA

NV-18-12-134 2400.000 Acres

T.0240N, R.0620E, 21 MDM, NV

Sec. 022 ALL;
027 ALL;

034 ALL;
035 NW,S2;

White Pine County
Ely DO
GHMA

NV-18-12-135 1759.340 Acres

T.0220N, R.0630E, 21 MDM, NV

Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1-2;
002 S2NE,SE;
011 NE;
012 ALL;

White Pine County
Ely DO
PHMA,GHMA,OHMA

NV-18-12-136 2018.040 Acres

T.0220N, R.0630E, 21 MDM, NV

Sec. 003 LOTS 1-4;
003 S2NE,S2NW,S2;
004 LOTS 1-4;
004 S2NE,S2NW,S2;
005 LOTS 1-2;
005 S2NE;
005 PROT W2,SE;

White Pine County
Ely DO
PHMA,GHMA
N-5485

NV-18-12-137 1994.000 Acres

T.0220N, R.0630E, 21 MDM, NV

Sec. 006 PROT ALL;
008 PROT ALL;
009 ALL;

White Pine County
Ely DO
PHMA, GHMA

NV-18-12-138 2427.000 Acres

T.0220N, R.0630E, 21 MDM, NV

Sec. 007 PROT ALL;
018 PROT ALL;
019 PROT ALL;
030 PROT ALL;

White Pine County
Ely DO
OHMA,GHMA

NV-18-12-139 1543.000 Acres

T.0220N, R.0630E, 21 MDM, NV

Sec. 010 N2,N2SW,SWSW;
015 S2NE,S2NW,S2;
016 S2NE,NWNE,SE;

016 PROT W2;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-140 1680.960 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 013 ALL;
014 LOTS 1-15;
014 E2NE,S2SW,SWSE;
024 LOTS 1-6;
024 N2,E2SW,SE;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-141 1920.000 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 017 PROT ALL;
020 PROT ALL;
029 PROT ALL;
White Pine County
Ely DO
GHMA

NV-18-12-142 1941.000 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 021 PROT ALL;
028 PROT ALL;
033 PROT ALL;
White Pine County
Ely DO
GHMA

NV-18-12-143 1947.000 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 022 NE;
022 PROT W2,SE;
027 PROT ALL;
034 PROT ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-144 1680.000 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 023 W2NE,W2;
026 ALL;
035 ALL;
White Pine County
Ely DO
PHMA

NV-18-12-145 640.000 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 025 E2,E2NW;

036 NE,E2SE;
White Pine County
Ely DO
PHMA,OHMA

NV-18-12-146 1265.000 Acres
T.0220N, R.0630E, 21 MDM, NV
Sec. 031 PROT ALL;
032 PROT ALL;
White Pine County
Ely DO
PHMA,GHMA,OHMA

NV-18-12-147 2398.550 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
002 LOTS 1;
002 SENE,E2SE;
011 E2;
012 ALL;
013 W2;
014 E2;
White Pine County
Ely DO
OHMA

NV-18-12-148 2154.760 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 003 LOTS 1-4;
003 S2NE,S2NW,S2;
004 LOTS 1-4;
004 S2NE,S2NW,S2;
005 LOTS 1-3;
005 S2NE,S2NW,S2;
006 S2NE,SENE,NESW,N2SE,SESE;
White Pine County
Ely DO
PHMA,GHMA
N-5485

NV-18-12-149 2504.580 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 007 LOTS 1-4;
007 NENE,S2NE,E2NW,E2SW,SE;
008 ALL;
009 ALL;
010 ALL;
White Pine County
Ely DO
PHMA

NV-18-12-150 2240.000 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 015 W2NE,W2,W2SE;
016 ALL;

021 ALL;
022 W2NE,W2,W2SE;
White Pine County
Ely DO
PHMA

NV-18-12-151 2139.290 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 017 ALL;
018 LOTS 1,2,4;
018 NE,E2NW,N2SE;
019 LOTS 1-3;
019 S2NE,E2NW,E2SW,SE;
020 N2NE,SWNE,NENW,S2NW,S2;
White Pine County
Ely DO
PHMA

NV-18-12-152 1160.000 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 023 N2,N2SW,SE;
024 W2NW,W2SW,SESSE;
025 E2NE,SE;
026 NENE;
036 N2NE,SENE;
White Pine County
Ely DO
OHMA

NV-18-12-153 1908.100 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 028 ALL;
029 ALL;
030 LOTS 1-4;
030 E2,E2NW,E2SW;
White Pine County
Ely DO
PHMA, GHMA

NV-18-12-154 1909.600 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 031 LOTS 1-4;
031 E2,E2NW,E2SW;
032 ALL;
033 ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-155 1000.000 Acres
T.0230N, R.0630E, 21 MDM, NV
Sec. 035 E2,E2NW,E2SW;
036 SWNE,W2,SE;
White Pine County
Ely DO
PHMA

NV-18-12-156 2000.530 Acres
T.0240N, R.0630E, 21 MDM, NV
Sec. 001 LOTS 3-4;
001 S2NW;
002 LOTS 1,3-4;
002 S2NE,S2NW,S2;
010 S2NE,SENE,S2;
011 ALL;
012 SW;
White Pine County
Ely DO
PHMA

NV-18-12-157 1520.000 Acres
T.0240N, R.0630E, 21 MDM, NV
Sec. 014 N2,N2SW,SE;
023 W2NE,SW,W2SE;
026 W2;
035 W2;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-158 2280.000 Acres
T.0240N, R.0630E, 21 MDM, NV
Sec. 015 N2,SW,N2SE,SWSE;
022 W2,S2SE;
027 ALL;
034 ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-159 2400.000 Acres
T.0240N, R.0630E, 21 MDM, NV
Sec. 016 ALL;
021 ALL;
028 ALL;
033 W2,SE;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-160 1467.430 Acres
T.0240N, R.0630E, 21 MDM, NV
Sec. 017 S2NE,NW,NESW,SE;
018 LOTS 1-4;
018 NE,E2NW,E2SW,W2SE;
020 LOTS 1;
020 E2,N2SW,SESSE;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-161 1731.080 Acres

T.0240N, R.0630E, 21 MDM, NV
Sec. 029 LOTS 1;
029 E2,NENW,S2NW,SW;
030 LOTS 5-6;
030 SENE,NESE,S2SE;
031 LOTS 1-2;
031 N2NE,SENE,E2NW;
032 N2,N2SW,SESW,SE;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-162 1790.080 Acres

T.0240N, R.0650E, 21 MDM, NV
Sec. 001 LOTS 1-4;
001 S2NE,S2NW,S2;
012 E2,E2NW,NESW,S2SW;
013 N2NE,SENE;
024 SESE;
025 E2,SENW,NESW,S2SW;

White Pine County

Ely DO

NV-18-12-163 760.000 Acres

T.0240N, R.0650E, 21 MDM, NV
Sec. 035 SENE,E2SE;
036 ALL;

White Pine County

Ely DO

NV-18-12-164 2538.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 001 PROT ALL;
002 PROT ALL;
003 PROT ALL;
004 PROT ALL;

White Pine County

Ely DO

PHMA

NV-18-12-165 2520.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 005 PROT ALL;
006 PROT ALL;
007 PROT ALL;
008 PROT ALL;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-166 2560.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 009 PROT ALL;
010 PROT ALL;
011 PROT ALL;
012 PROT ALL;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-167 2560.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 013 PROT ALL;
014 PROT ALL;
015 PROT ALL;
016 PROT ALL;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-168 2560.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 017 PROT ALL;
020 PROT ALL;
029 PROT ALL;
032 PROT ALL;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-169 2560.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 021 PROT ALL;
022 PROT ALL;
023 PROT ALL;
024 PROT ALL;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-170 2560.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 025 PROT ALL;
026 PROT ALL;
027 PROT ALL;
028 PROT ALL;

White Pine County

Ely DO

PHMA,GHMA

NV-18-12-171 1253.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 030 PROT ALL;
031 PROT ALL;
White Pine County
Ely DO
PHMA

NV-18-12-172 2560.000 Acres

T.0240N, R.0660E, 21 MDM, NV
Sec. 033 PROT ALL;
034 PROT ALL;
035 PROT ALL;
036 PROT ALL;
White Pine County
Ely DO
PHMA,GHMA

NV-18-12-173 2560.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 001 PROT ALL;
002 PROT ALL;
003 PROT ALL;
004 PROT ALL;
White Pine County
Ely DO

NV-18-12-174 2552.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 005 PROT ALL;
006 PROT ALL;
007 PROT ALL;
008 PROT ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-175 2560.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 009 PROT ALL;
010 PROT ALL;
011 PROT ALL;
012 PROT ALL;
White Pine County
Ely DO
OHMA

NV-18-12-176 2560.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 013 PROT ALL;
014 PROT ALL;
015 PROT ALL;
016 PROT ALL;
White Pine County
Ely DO
OHMA

NV-18-12-177 2555.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 017 PROT ALL;
018 PROT ALL;
019 PROT ALL;
020 PROT ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-178 2560.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 021 PROT ALL;
022 PROT ALL;
023 PROT ALL;
024 PROT ALL;
White Pine County
Ely DO
OHMA

NV-18-12-179 2560.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 025 PROT ALL;
026 PROT ALL;
027 PROT ALL;
028 PROT ALL;
White Pine County
Ely DO
OHMA

NV-18-12-180 2559.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 029 PROT ALL;
030 PROT ALL;
031 PROT ALL;
032 PROT ALL;
White Pine County
Ely DO
PHMA,OHMA,GHMA

NV-18-12-181 2560.000 Acres

T.0210N, R.0670E, 21 MDM, NV
Sec. 033 PROT ALL;
034 PROT ALL;
035 PROT ALL;
036 PROT ALL;
White Pine County
Ely DO
OHMA

NV-18-12-182 2536.900 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 001 LOTS 1-4;

001 S2NE,S2NW,S2;

002 LOTS 1-4;

002 S2NE,S2NW,S2; EXCEPT MS

003 LOTS 1-4;

003 S2NE,S2NW,S2;

004 LOTS 1-4;

004 S2NE,S2NW,S2;

White Pine County

Ely DO

EXCEPT MS37A 4426

OHMA

NV-18-12-183 2532.850 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 005 LOTS 1-4;

005 S2NE,S2NW,S2;

006 LOTS 1-7;

006 S2NE,SENW,E2SW,SE;

007 LOTS 1-4;

007 E2,E2NW,E2SW;

008 ALL;

White Pine County

Ely DO

NV-18-12-184 2560.000 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 010 ALL;

011 ALL;

012 ALL;

009 ALL;

White Pine County

Ely DO

NV-18-12-185 2395.010 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 013 N2,SW;

014 ALL; EXCEPT MS 4426

015 ALL;

016 ALL;

White Pine County

Ely DO

OHMA

NV-18-12-186 2539.360 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 017 ALL;

018 LOTS 1-4;

018 E2,E2NW,E2SW;

019 LOTS 1-4;

019 E2,E2NW,E2SW;

020 ALL;

White Pine County

Ely DO

OHMA

NV-18-12-187 2560.000 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 021 ALL;

022 ALL;

023 ALL;

024 ALL;

White Pine County

Ely DO

NV-18-12-188 2560.000 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 025 ALL;

026 ALL;

027 ALL;

028 ALL;

White Pine County

Ely DO

NV-18-12-189 2540.640 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 029 ALL;

030 LOTS 1-4;

030 E2,E2NW,E2SW;

031 LOTS 1-4;

031 E2,E2NW,E2SW;

032 ALL;

White Pine County

Ely DO

NV-18-12-190 2440.000 Acres

T.0230N, R.0670E, 21 MDM, NV

Sec. 033 ALL;

034 N2NE,N2NW,SWNW,S2;

035 ALL;

036 ALL;

White Pine County

Ely DO

NV-18-12-191 2207.990 Acres

T.0210N, R.0680E, 21 MDM, NV

Sec. 001 LOTS 3-4;

001 S2NW,NWSW,N2SE,SESE;

002 LOTS 1-4;

002 S2NE,S2NW,SW,N2SE,SWSE;

003 LOTS 1-4;

003 S2NE,S2NW,S2;

004 LOTS 1-4;

004 S2NE,S2NW,S2;

White Pine County

Ely DO

OHMA

NV-18-12-192 1281.880 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 005 LOTS 1-4;
005 S2NE,S2NW,S2;
008 ALL;
White Pine County
Ely DO

NV-18-12-193 1278.170 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 006 LOTS 1-7;
006 S2NE,SENW,E2SW,SE;
007 LOTS 1-4;
007 E2,E2NW,E2SW;
White Pine County
Ely DO

NV-18-12-194 2000.000 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 009 ALL;
010 ALL;
011 W2NE,W2,W2SE,SESE;
012 E2NE,SESW,S2SE;
White Pine County
Ely DO
OHMA

NV-18-12-195 2539.320 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 013 ALL;
014 LOTS 1-2;
014 N2,E2SW,SE;
015 LOTS 1-3;
015 N2,SW,SWSE;
016 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-196 2559.440 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 017 ALL;
018 LOTS 1-4;
018 E2,E2NW,E2SW;
019 LOTS 1-4;
019 E2,E2NW,E2SW;
020 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-197 2560.000 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 021 ALL;
022 ALL
02 ALL;
024 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-198 2560.000 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 025 ALL;
026 ALL;
027 ALL;
028 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-199 2559.640 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 029 ALL;
030 LOTS 1-4;
030 E2,E2NW,E2SW;
031 LOTS 1-4;
031 E2,E2NW,E2SW;
032 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-200 2560.000 Acres

T.0210N, R.0680E, 21 MDM, NV
Sec. 033 ALL;
034 ALL;
035 ALL;
036 ALL;
White Pine County
Ely DO
OHMA,GHMA

NV-18-12-201 2560.000 Acres

T.0220N, R.0570E, 21 MDM, NV
Sec. 011 ALL;
012 ALL;
013 ALL;
014 ALL;
White Pine County
Ely DO
OHMA

NV-18-12-202 2560.000 Acres

T.0110N, R.0540E, 21 MDM, NV
 Sec. 015 PROT ALL;
 016 PROT ALL;
 021 PROT ALL;
 022 PROT ALL;

Nye County
 Ely DO

NV-18-12-203 2560.000 Acres

T.0110N, R.0540E, 21 MDM, NV
 Sec. 023 PROT ALL;
 024 PROT ALL;
 025 PROT ALL;
 026 PROT ALL;

Nye County
 Ely DO

NV-18-12-204 1280.000 Acres

T.0110N, R.0540E, 21 MDM, NV
 Sec. 027 PROT ALL;
 028 PROT ALL;

Nye County
 Ely DO

NV-18-12-205 1277.000 Acres

T.0110N, R.0550E, 21 MDM, NV
 Sec. 019 PROT ALL;
 030 PROT ALL;

Nye County
 Ely DO

NV-18-12-206 2560.000 Acres

T.0120N, R.0570E, 21 MDM, NV
 Sec. 009 ALL;
 010 ALL;
 011 ALL;
 014 ALL;

Nye County
 Ely DO

NV-18-12-207 2034.360 Acres

T.0120N, R.0570E, 21 MDM, NV
 Sec. 006 LOTS 1-9;
 006 S2NE,SENW,E2SW,SE;
 007 LOTS 1-4;
 007 E2,E2NW,E2SW;
 018 LOTS 1-4;
 018 E2,E2NW,E2SW;

Nye County
 Ely DO

NV-18-12-208 1928.240 Acres

T.0120N, R.0570E, 21 MDM, NV
 Sec. 005 LOTS 1-4;
 005 S2NE,S2NW,S2;
 008 ALL;
 017 ALL;

Nye County
 Ely DO

NV-18-12-209 2560.000 Acres

T.0120N, R.0570E, 21 MDM, NV
 Sec. 015 ALL;
 016 ALL;
 021 ALL;
 022 ALL;

Nye County
 Ely DO

NV-18-12-210 1600.000 Acres

T.0120N, R.0570E, 21 MDM, NV
 Sec. 026 W2;
 027 ALL;
 028 ALL;

Nye County
 Ely DO

NV-18-12-211 2153.000 Acres

T.0130N, R.0570E, 21 MDM, NV
 Sec. 007 LOTS 1-12;
 007 E2;
 018 LOTS 1-12;
 018 E2;
 019 LOTS 1-12;
 019 E2;

Nye County
 Ely DO

Number of Parcels - 202

Total Acreage – 426,351.032

Total number of Parcels with Presale Offers - 0

Parcel Number of Parcels with Presale Offers –0

Total Acreage with Presale Offers – 0

Any portion of the listed lands may be deleted upon determination that such lands are not available for leasing.

Appendix D-Stipulations

A. Stipulations and Lease Notices

Stipulations are restrictions that are included in the current applicable land use plan – the Ely RMP.

Lease Notices serve to inform prospective lessees of other regulatory authorities that may apply to a parcel.

BLM Nevada Standard Stipulations (#NV-L-00-A-LN)

BLM Nevada Standard Stipulations

These stipulations and notices apply to all parcels all lands and represent standard Best Management Practices for ensuring compliance with extant Federal Laws and resource protection.

T&E, Sensitive and Special Status Species

The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. §1531 et seq., including completion of any required procedure for conference or consultation.

Migratory Birds

The Operator is responsible for compliance with provisions of the Migratory Bird Treaty Act by implementing measures to prevent take of migratory birds. Operators should be aware that any ground clearing or other disturbance (such as creating cross-country access to sites, drilling, and/or construction) during the migratory bird (including raptors) nesting season (March 1 - July 31) risks a violation of the Migratory Bird Treaty Act. Disturbance to nesting migratory birds should be avoided by conducting surface disturbing activities outside the migratory bird nesting season.

If surface disturbing activities must be implemented during the nesting season, a preconstruction survey for nesting migratory birds should be performed by a qualified wildlife biologist, during the breeding season (if work is not completed within a specified time frame, then additional surveys may be needed). If active nests are found, an appropriately-sized no surface disturbance buffer determined in coordination with the BLM biologist should be placed on the active nest until the nesting attempt has been completed. If no active nests are found, construction activities must occur within the survey validity time frame specified in the conditions of approval.

Cultural Resources and Tribal Consultation

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, Executive Order 13007, or other statutes and executive orders. The BLM will not approve any ground-disturbing activities that may affect any such properties or

resources until it completes its obligations (e.g., State Historic Preservation Officer (SHPO) and tribal consultation) under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized, or mitigated.

Fossils

This area has low to moderate potential for vertebrate paleontological resources, unless noted to have higher potential in a separate stipulation. This area may contain vertebrate paleontological resources. Inventory and/or on-site monitoring during disturbance or spot checking may be required of the operator. In the event that previously undiscovered paleontological resources are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to the attention of the authorized officer of the BLM. Operations within 250 feet of any such discovery will not be resumed until written authorization to proceed is issued by the Authorized Officer. The lessee will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

Water

The Operator is responsible for compliance with provisions of the Clean Water Act, Safe Drinking Water Act, and applicable State laws and regulations regarding protection of state water resources. Operators should contact Nevada Division of Water Resources and Nevada Division of Environmental Protection regarding necessary permits and compliance measures for any construction or other activities.

Mining Claims

This parcel may contain existing mining claims and/or mill sites located under the 1872 Mining Law. To the extent it does, the oil and gas lessee must conduct its operations, so far as reasonably practicable, to avoid damage to any known deposit of any mineral for which any mining claim on this parcel is located, and should not endanger or unreasonably or materially interfere with the mining claimant's operations, including any existing surface or underground improvements, workings, or facilities which may have been made for the purpose of mining operations. The provisions of the Multiple Mineral Development Act (30 U.S.C. 521 et seq.) shall apply on the leased lands.

Fire

The following precautionary measures should be taken to prevent wildland fires. In the event your operations should start a fire, you could be held liable for all suppression costs.

- All vehicles should carry fire extinguishers and a minimum of 10 gallons of water.
- Adequate fire-fighting equipment i.e. shovel, Pulaski, extinguisher(s) and a minimum 10 gallons of water should be kept at the drill site(s).
- Vehicle catalytic converters should be inspected often and cleaned of all brush and grass debris.
- When conducting welding operations, they should be conducted in an area free from or mostly free from vegetation. A minimum of 10 gallons water and a shovel should be on hand to extinguish any fires created from the sparks. Extra personnel should be at the welding site to watch for fires created by welding sparks.
- Report wildland fires immediately to the BLM Central Nevada Interagency Dispatch Center (CNIDC) at (775) 623-3444. Helpful information to reported is location (latitude and longitude if possible), what's burning, time started, who/what is near the fire and direction of fire spread.
- When conducting operations during the months of May through September, the operator must contact the BLM Ely District Office, Division of Fire and Aviation at (775) 289-1800 to find out about any fire restrictions in place for the area of operation and to advise this office of approximate beginning and ending dates for your activities.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-004 through NV-18-12-008 and NV-18-12-012 through NV-18-12-211	ALL LANDS

Stipulation – Raptor Nest Sites
(#NV-L-06-B-TL)

Stipulation: Timing Limitation. No surface activity from May 1 through July 15 within 0.5 mile of a raptor nest site which has been active within the past five years.

Objective [Purpose]: To protect raptor nesting activities necessary to maintaining the critical life stages of existing raptor populations.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect raptor nest sites being protected by the restriction. An exception may also be granted if the proponent, BLM, and other affected interests, in consultation with Nevada Department of Wildlife, negotiate mitigation that would satisfactorily offset the anticipated impacts. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

Modification: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area can be occupied without adversely affecting raptor nesting activity. The dates for the timing restriction may be modified if new information indicates the dates are not valid for the leasehold. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver: The stipulation may be waived if the authorized officer, in consultation with Nevada Department of Wildlife determines that the entire leasehold no longer contains raptor nest sites. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-004 through NV-18-12-008 and NV-18-12-012 through NV-18-12-211	ALL LANDS

**Stipulation – Pronghorn Antelope Seasonal Habitat
(#NV-L-01-A-TL)**

Stipulation: Timing Limitation (TL) -No surface activity within Pronghorn Antelope crucial winter habitat from November 1 through March 31.

Objective [Purpose]: To protect Pronghorn Antelope crucial winter habitat necessary to maintaining the critical life stages of Pronghorn wildlife populations.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Pronghorn Antelope and Its habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Pronghorn Antelope and its habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

Modification: The boundaries of the stipulated area may be modified If the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the crucial winter pronghorn habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, Including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable pronghorn habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1--4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel #	Legal Land Description
	Mt. Diablo Meridian, Nevada
NV-18-12-173	T. 21 N., R. 67 E., Sec. 4, SW1/4SW1/4.
NV-18-12-174	T. 21 N., R. 67 E., Sec. 5, SW1/4NE1/4, W1/2 and SE1/4; Secs. 6 through 8.
NV-18-12-175	T. 21 N., R. 67 E., Sec. 9, W1/2NE1/4, W1/2 and W1/2SE1/4.
NV-18-12-176	T. 21 N., R. 67 E., Sec. 16, W1/2NE1/4, W1/2 and SE1/4.
NV-18-12-177	T. 21 N., R. 67 E., Secs. 17 thru 20.
NV-18-12-178	T. 21 N., R. 67 E., Sec. 21; Sec. 22, W1/2NW1/4, SE1/4NW1/4, SW1/4 and SW1/4SE1/4.
NV-18-12-179	T. 21 N., R. 67 E., Sec. 26, W1/2SW1/4; Sec. 27 and 28.

NV-18-12-180	T. 21 N., R. 67 E., Sec. 29 and 30; Sec. 31, NE1/4, N1/2NW1/4, SE1/4NW1/4 and NE1/4SE1/4; Sec. 32, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-181	T. 21 N., R. 67 E., Sec. 33 and 34; Sec. 35, SW1/4NE1/4, W1/2 and SE1/4; Sec. 36, SW1/4SW1/4 and SE1/4SE1/4.
NV-18-12-196	T. 21 N., R. 68 E., Sec. 20, SE1/4SW1/4 and SE1/4.
NV-18-12-197	T. 21 N., R. 68 E., Sec. 21, SW1/4SW1/4.
NV-18-12-198	T. 21 N., R. 68 E., Sec. 28, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-199	T. 21 N., R. 68 E., Sec. 29; Sec. 30, SE1/4NE1/4, NE1/4SE1/4 and S1/2SE1/4; Sec. 31, Lots 3 and 4, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 32.
NV-18-12-200	T. 21 N., R. 68 E., Sec. 33, W1/2NW1/4.

**Stipulation – Pronghorn Antelope Kidding Habitat
(#NV-L-01-B-TL)**

Stipulation: Timing Limitation (TL) -No surface activity within pronghorn antelope kidding areas from April 15 through June 30

Objective [Purpose]: To protect Pronghorn Antelope Kidding habitat necessary to maintaining the critical life stages of Pronghorn wildlife populations.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Pronghorn Antelope Kidding Areas. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Pronghorn Antelope Kidding Areas. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

Modification: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain Pronghorn Antelope Kidding habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1- 4, including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable Pronghorn Kidding habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1--4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-042	T. 25 N., R. 57 E., Sec. 11, W1/2SW1/4, Sec. 13, W1/2SW1/4 and SE1/4SW1/4; Sec. 14, W1/2NW1/4 and S1/2.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 23, N1/2 and N1/2SE1/4; Sec. 24.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, N1/2NE1/4.
NV-18-12-053	T. 23 N., R. 58 E., Secs. 1 and 2; Sec. 5, Lots 1 thru 3, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-055	T. 22 N., R. 58 E., Sec. 10, E1/2, E1/2 NW1/4 and NE1/4SW1/4; Secs. 11 and 12.

NV-18-12-056	T. 22 N., R. 58 E., Sec. 14; Sec. 23, NE1/4 and N1/2NW1/4.
NV-18-12-057	T. 22 N., R. 58 E., Sec. 15, NE1/4 and E1/2SE1/4.
NV-18-12-065	T. 23 N., R. 58 E., Sec. 24, S1/2.
NV-18-12-066	T. 23 N., R. 58 E., Sec. 22, SE1/4SE1/4; Sec. 23, NE1/4SW1/4, S1/2SW1/4 and SE1/4; Sec. 27, NE1/4NE1/4, S1/2NE1/4, E1/2SW1/4 and SE1/4.
NV-18-12-067	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-070	T. 23 N., R. 58 E., Sec. 34.
NV-18-12-081	T. 25 N., R. 58 E., Sec. 3, Lot 4, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-082	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, E1/2, E1/2NW1/4 and E1/2SW1/4; Secs. 8 and 9; Sec. 10, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-085	T. 25 N., R. 58 E., Sec. 16; Sec. 21, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-086	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-090	T. 25 N., R. 58 E., Sec. 29, N1/2NE1/4, N1/2NW1/4 and SW1/4NW1/4; Sec. 30, Lots 1 and 2, NE1/4 and E1/2NW1/4.
NV-18-12-100	T. 23 N., R. 59 E., Sec. 19, Lot 4 and SE1/4SW1/4.

**Stipulation – Mule Deer Seasonal Habitat
(#NV-L-02-A-TL)**

Stipulation: Timing Limitation (TL) -No surface activity within crucial winter habitat from November 1 through March 31.

Objective [Purpose]: To protect mule crucial winter habitat necessary to maintaining the critical life stages of Mule Deer wildlife populations.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Mule Deer and its habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts the Mule Deer and its habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

Modification: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the crucial winter habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1--4, including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable Mule Deer habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1--4, including provisions requiring public review for Issues of major public concern, or substantial waivers.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-012	T. 22 N., R. 57 E., Sec. 3, Lot 4.
NV-18-12-013	T. 22 N., R. 57 E., Entire Parcel.
NV-18-12-014	T. 22 N., R. 57 E., Entire Parcel.
NV-18-12-015	T. 22 N., R. 57 E., Secs. 9 and 16.
NV-18-12-016	T. 22 N., R. 57 E., Sec. 19, N1/2NE1/4, SE1/4NE1/4 and NE1/4NW1/4.
NV-18-12-017	T. 22 N., R. 57 E., Sec. 20, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 29, NE1/4 and E1/2SE1/4.
NV-18-12-018	T. 22 N., R. 57 E., Sec. 21; Sec. 28, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-020	T. 22 N., R. 57 E., Sec. 32, NE1/4NE1/4;

	Sec. 33, NW1/4NE1/4, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4; Secs. 6 and 7.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 8, W1/2NE1/4, SE1/4NE1/4, W1/2 and SE1/4; Sec. 9, SW1/4NW1/4 and S1/2; Secs. 16 and 17.
NV-18-12-025	T. 23 N., R. 57 E., Sec. 10, W1/2SW1/4 and SE1/4SW1/4; Sec. 15, N1/2NW1/4, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-027	T. 23 N., R. 57 E., Entire Parcel.
NV-18-12-028	T. 23 N., R. 57 E., Entire Parcel.
NV-18-12-029	T. 23 N., R. 57 E., Sec. 22, W1/2NW1/4 and W1/2SW1/4; Sec. 27, N1/2NW1/4, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-031	T. 23 N., R. 57 E., Secs 32 and 33; Sec. 34, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 31, Lot 4, SE1/4SW1/4 and SW1/4SE1/4.
NV-18-12-097	T. 22 N., R. 59 E., Sec. 33, NE1/4NE1/4, S1/2NE1/4, E1/2SW1/4 and SE1/4.
NV-18-12-098	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-099	T. 23 N., R. 59 E., Sec. 4; Sec. 5, E1/2SE1/4.

**Stipulation – Mule Deer Fawning Habitat
(#NV-L-02-C-TL)**

Stipulation: Timing Limitation (TL) -No surface activity within Mule Deer fawning from April 15 through June 30.

Objective [Purpose]: To protect Mule Deer Fawning habitat necessary to maintaining the critical life stages of Mule Deer wildlife populations.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Mule Deer and its Fawning habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Mule Deer and its Fawning habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

Modification: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the fawning mule deer habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new Information indicates the dates are not valid for the leasehold. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1--4, including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable mule deer habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1--4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-125	T. 22 N., R. 62 E., Entire Parcel.
NV-18-12-126	T. 22 N., R. 62 E., Entire Parcel.
NV-18-12-127	T. 22 N., R. 62 E., Entire Parcel.
NV-18-12-128	T. 23 N., R. 62 E., Sec. 1, Lot 4, SW1/4NW1/4 and SW1/4; Secs. 2 and 3.
NV-18-12-129	T. 23 N., R. 62 E., Secs. 10 and 11; Sec. 12, Lot 1, NW1/4 and N1/2SW1/4; Sec. 13, Lots 1 and 2, NW1/4NE1/4, NE1/4NW1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-130	T. 23 N., R. 62 E.,

	Entire Parcel.
NV-18-12-131	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-132	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 34, S1/2SW1/4 and S1/2SE1/4; Sec. 35, S1/2SW1/4 and S1/2SE1/4.
NV-18-12-137	T. 22 N., R. 63 E., Sec. 6, W1/2 and W1/2SE1/4.
NV-18-12-138	T. 22 N., R. 63 E., Sec. 7, W1/2, W1/2NE1/4 and W1/2SE1/4; Sec. 18, W1/2, W1/2NE1/4 and W1/2SE1/4; Sec. 19, NW1/4NE1/4, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-153	T. 23 N., R. 63 E., Sec. 30, Lots 2 thru 4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, Lots 1 thru 4, and E1/2SW1/4.
NV-18-12-182	T. 23 N., R. 67 E., Sec. 3, Lots 3 and 4, and SW1/4NW1/4; Sec. 4.
NV-18-12-183	T. 23 N., R. 67 E., Sec. 5; Sec. 6, NE1/4SE1/4 and S1/2SE1/4; Sec. 7, E1/2; Sec. 8, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-184	T. 23 N., R. 67 E., Sec. 9, N1/2NW1/4.
NV-18-12-186	T. 23 N., R. 67 E., Sec. 17, W1/2 and SE1/4; Sec. 18, Lots 2 thru 4, E1/2, SE1/4NW1/4 and E1/2SW1/4; Sec. 19; Sec. 20, N1/2, N1/2SW1/4, SW1/4SW1/4 and NW1/4SE1/4.
NV-18-12-189	T. 23 N., R. 67 E., Sec. 29, NW1/4NW1/4; Sec. 30, Lots 1 and 2, NE1/4, E1/2NW1/4 and N1/2SE1/4.
NV-18-12-191	T. 21N., R. 68 E., Sec. 1, Lots 3 and 4, S1/2NW1/4, NW1/4SW1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 2, Lots 1 thru 3, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 3, SE1/4SE1/4.
NV-18-12-194	T. 21N., R. 68 E., Sec. 10, E1/2NE1/4 and E1/2SE1/2; Sec. 11, W1/2NE1/4, W1/2, W1/2SE1/4 and SE1/4SE1/4; Sec. 12, E1/2NE1/4, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-195	T. 21N., R. 68 E., Sec. 13, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 14, NE1/4, N1/2NW1/4 and SE1/4NW1/4;

	Sec. 15, NE1/4NE1/4.
NV-18-12-197	T. 21N., R. 68 E., Sec. 24, N1/2NE1/4.

Stipulation – Elk Calving Habitat
(#NV-L-03-B-TL)

Stipulation: Timing Limitation (TL) -No surface activity within Elk calving areas from April 15 through June 30.

Objective [Purpose]: To protect Elk calving habitat necessary to maintaining the critical life stages of Elk wildlife populations.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Elk and its habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Elk and its habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

Modification: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the elk calving habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable elk habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-191	T. 21 N., R. 68 E., Sec. 1, Lot 3, S1/2NW1/4, NW1/4SW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-194	T. 21 N., R. 68 E., Sec. 11, SE1/4SE1/4; Sec. 12, E1/2NE1/4, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-195	T. 21 N., R. 68 E., Sec. 13, N1/2NE1/4, SE1/4NE1/4 and N1/2NW1/4.

**Stipulation – Greater Sage Grouse (GRSG) Lekking Habitat –
General Habitat Management Area (GHMA)
(#NV-B-16-B-TL)**

Stipulation: Timing Limitation (TL) - Seasonal protection within 4.0 miles of active or pending GRSG leks in General Management Areas (GHMA) – Manage fluid mineral resources with timing limitations. NSO would be allowed within 4.0 miles of active or pending GRSG leks from March 1 through May 15.

Objective [Purpose]: To protect GRSG lekking habitat.

Exception: The Authorized Officer may grant an exception where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat. An exception may also be granted if the proponent, the BLM, and the appropriate state agency negotiate mitigation that would provide a clear net conservation gain to GRSG and its habitat.

Modification: The Authorized Officer may modify the size and shape of the restricted area or the period of limitation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat.

Waiver: The Authorized Officer may waive the stipulation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the described lands do not contain GRSG or suitable habitat or are otherwise incapable of serving the requirements of GRSG and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-013	T. 22 N., R. 57 E., Sec. 4, Lots 3 and 4, S1/2NW1/4 and SW1/4; Sec. 5; Sec. 6, Lot 1, SE1/4NE1/4 and NE1/4SE1/4.
NV-18-12-014	T. 22 N., R. 57 E., Sec. 8, E1/2, E1/2NW1/4 and NE1/4SW1/4; Sec. 17, E1/2, S1/2NW1/4 and SW1/4; Sec. 18, Lot 4, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-015	T. 22 N., R. 57 E., Sec. 9, W1/2; Sec. 16, NW1/4 and W1/2SW1/4.
NV-18-12-016	T. 22 N., R. 57 E., Sec. 19; Sec. 30, Lots 1 and 2, N1/2NE1/4, SW1/4NE1/4 and NE1/4NW1/4.
NV-18-12-017	T. 22 N., R. 57 E., Sec. 20, N1/2, SW1/4 and NW1/4SE1/4; Sec. 29, NW1/4NW1/4.

NV-18-12-018	T. 22 N., R. 57 E., Sec. 21, NW1/4NW1/4.
NV-18-12-019	T. 22 N., R. 57 E., Sec. 25, E1/2SW1/4 and SE1/4.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, Lot 4, SW1/4NW1/4 and SW1/4; Sec. 6, Lots 1 thru 7, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 7.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 8, W1/2; Sec. 17, N1/2NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-027	T. 23 N., R. 57 E., Sec. 18, Lots 1 and 2, NE1/4 and E1/2NW1/4.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, E1/2, E1/2NW1/4, NE1/4SW1/4 and S1/2SW1/4; Sec. 29, W1/2NE1/4, NW1/4, NE1/4SW1/4 and SW1/4SE1/4.
NV-18-12-031	T. 23 N., R. 57 E., Sec. 32, NE1/4, SE1/4NW1/4 and S1/2; Sec. 33, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-038	T. 24 N., R. 57 E., Sec. 32, SW1/4SW1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 19, Lot 4; Sec. 30, Lots 1, 2 and 4, NE1/4NW1/4; Sec. 31, Lots 1 thru 4, SW1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-042	T. 25 N., R. 57 E., Sec. 11, W1/2SW1/4; Sec. 13, W1/2SW1/4 and SE1/4SW1/4; Sec. 14, W1/2NW1/4 and S1/2.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 15, E1/2; Sec. 22, E1/2NE1/4 and NE1/4SE1/4; Sec. 23; Sec. 24, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, W1/2NE1/4, NW1/4, N1/2SW1/4, NW1/4SE1/4 and S1/2SE1/4; Sec. 26, NE1/4 and NE1/4NW1/4.
NV-18-12-046	T. 25 N., R. 57 E., Sec. 36, N1/2NE1/4, SE1/4NE1/4 and E1/2SE1/4.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, SW1/4NE1/4, S1/2NW1/4 and N1/2; Secs. 22, 27 and 28.
NV-18-12-051	T. 21 N., R. 58 E., Sec. 16, S1/2NE1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4; Sec. 20, NE1/4NE1/4, S1/2NE1/4, SE1/4SW1/4 and SE1/4; Sec. 21.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 1 and 2, S1/2NE1/4 and SE1/4NW1/4; Sec. 3, S1/2SW1/4.

NV-18-12-055	T. 22 N., R. 58 E., Sec. 9; Sec. 10, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-058	T. 22N., R. 58 E., Sec. 30, Lots 3 and 4, E1/2SW1/4 and SE1/4.
NV-18-12-059	T. 22 N., R. 58 E., Sec. 28, S1/2SW1/4.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 29, SW1/4, W1/2SE1/4 and SE1/4SE1/4.
NV-18-12-061	T. 23 N., R. 58 E., Sec. 2, Lot 4, SW1/4NW1/4 and W1/2SW1/4; Sec. 3, Lot 1, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 4, S1/2NE1/4 and S1/2.
NV-18-12-062	T. 23 N., R. 58 E., Sec. 5, Lot 19; Sec. 7, Lot 20.
NV-18-12-063	T. 23 N., R. 58 E., Sec. 8, Lots 1 thru 3, and lots 5 thru 16; Sec. 17; Sec. 18, Lots 5 and 6, lots 11 thru 14, and lots 18 thru 20.
NV-18-12-064	T. 23 N., R. 58 E., Sec. 9, N1/2, SW1/4 and NW1/4SE1/4; Sec. 10, N1/2NE1/4, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-066	T. 23 N., R. 58 E., Sec. 28, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-067	T. 23 N., R. 58 E., Sec. 36, SE1/4SE1/4.
NV-18-12-068	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-069	T. 23 N., R. 58 E., Sec. 30, Lots 5 thru 7, lots 10 thru 15, and lots 18 thru 20; Sec. 31, Lots 5 and 6, lots 11 thru 13, and lot 20.
NV-18-12-071	T. 24 N., R. 58 E., Sec. 1, Lots 1 thru 3, SW1/4NE1/4, SE1/4NW1/4, SW1/4 and NW1/4SE1/4; Sec. 2, Lot 3, S1/2NE1/4, S1/2NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4.
NV-18-12-072	T. 24 N., R. 58 E., Sec. 3, SE1/4SE1/4; Sec. 5, Lot 4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 6, Lots 1 thru 4, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4 and SE1/4; Sec. 8, W1/2NE1/4, N1/2NW1/4.
NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2SE1/4; Sec. 10, NE1/4, S1/2NW1/4, N1/2SW1/4 and N1/2SE1/4.
NV-18-12-075	T. 24 N., R. 58 E., Sec. 11, N1/2NE1/4, SW1/4NE1/4 and NW1/4; Sec. 12, NW1/4NW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, NE1/4SE1/4 and S1/2SE1/4; Sec. 25, N1/2, NW1/4SW1/4 and SE1/4;

	Sec. 26, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 34, E1/2SE1/4; Sec. 35, W1/2NE1/4 and W1/2.
NV-18-12-081	T. 25 N., R. 58 E., Sec. 1, SW1/4SW1/4; Sec. 2, S1/2SE1/4; Sec. 3, S1/2NW1/4 and NW1/4SW1/4.
NV-18-12-082	T. 25 N., R. 58 E., Sec. 4, Lot 4, S1/2NE1/4, S1/2NW1/4, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 5, Lot 1, SE1/4NE1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4; Sec. 6, SE1/4SE1/4.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, E1/2, SE1/4NW1/4 and E1/2SW1/4; Sec. 8, N1/2NE1/4, SW1/4NE1/4, NW1/4 and NW1/4SW1/4; Sec. 9, NW1/4NW1/4.
NV-18-12-084	T. 25 N., R. 58 E., Sec. 11, NE1/4 and N1/2SE1/4; Sec. 12, W1/2NE1/4, SE1/4NE1/4, W1/2 and SE1/4; Sec. 13, NE1/4, NE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-085	T. 25 N., R. 58 E., Sec. 18, Lots 1 thru 4, NW1/4NE1/4 and E1/2NW1/4.
NV-18-12-087	T. 25 N., R. 58 E., Sec. 24, NE1/4NE1/4 and SE1/4SE1/4.
NV-18-12-088	T. 25 N., R. 58 E., Sec. 25, E1/2, S1/2NW1/4 and SW1/4; Sec. 26, NE1/4SE1/4 and S1/2; Sec. 35, E1/2, SE1/4NW1/4 and E1/2SW1/4; Sec. 36.
NV-18-12-090	T. 25 N., R. 58 E., Sec. 30, Lot 4 and SE1/4SW1/4; Sec. 31, Lots 1 thru 4, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4; Sec. 32, SW1/4SW1/4.
NV-18-12-091	T. 16 N., R. 59 E., Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-092	T. 16 N., R. 59 E., Sec. 11, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 14, W1/2NE1/4, NW1/4, N1/2SW1/4 and NW1/4SE1/4.
NV-18-12-096	T. 17 N., R. 59 E., Sec. 25, SE1/4SE1/4; Sec. 36, E1/2, SE1/4NW1/4 and E1/2SW1/4.
NV-18-12-098	T. 23 N., R. 59 E., Sec. 10, E1/2NE1/4 and NE1/4SE1/4; Sec. 15, W1/2NE1/4.
NV-18-12-102	T. 25 N., R. 59 E., Sec. Lots 1, 3 and 4, and SE1/4SW1/4.
NV-18-12-104	T. 25 N., R. 59 E., Sec. 30, Lots 1 thru 4, E1/2NW1/4 and E1/2SW1/4;

	Sec. 31, Lots 1 thru 3.
NV-18-12-105	T. 15 N., R. 60 E., Sec. 1, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-106	T. 15 N., R. 60 E., Sec. 10, SW1/4NE1/4, SE1/4NW1/4 and S1/2; Sec. 15, W1/2NE1/4, W1/2 and SE1/4; Sec. 22.
NV-18-12-107	T. 15 N., R. 60 E., Sec. 12, E1/2NE1/4 and E1/2SE1/4; Sec. 13, E1/2, SE1/4NW1/4 and SW1/4; Sec. 14, W1/2.
NV-18-12-108	T. 15 N., R. 60 E., Sec. 16, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 17, SW1/4SW1/4; Sec. 20, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 21.
NV-18-12-109	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-110	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-111	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-112	T. 15 N., R. 60 E., Sec. 35; Sec. 36, N1/2NE1/4, SW1/4NE1/4, W1/2 and W1/2SE1/4.
NV-18-12-114	T. 16 N., R. 60 E., Sec. 5, Lots 2 thru 7; Sec. 6, Lots 1 thru 5, and lots 9 and 10.
NV-18-12-121	T. 16 N., R. 60 E., Sec. 25, Lot 4 and SW1/4SE1/4; Sec. 27, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-122	T. 16 N., R. 60 E., Sec. 28, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 29, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Sec. 32, N1/2NE1/4 and SE1/4NE1/4; Sec. 33, N1/2 and N1/2SE1/4.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, NW1/4 and N1/2SW1/4; Sec. 36, Lots 1 thru 4, W1/2NE1/4 SE1/4SW1/4 and W1/2SE1/4.
NV-18-12-125	T. 22 N., R. 62 E., Entire Parcel.
NV-18-12-126	T. 22 N., R. 62 E., Sec. 2, Lots 1 thru 4, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Sec. 11, E1/2; Sec. 14, E1/2NE1/4, NE1/4NW1/4, S1/2NW1/4, SW1/4 and SW1/4SE1/4.
NV-18-12-127	T. 22 N., R. 62 E., Sec. 15, SE1/4NE1/4 and E1/2SE1/4.

NV-18-12-128	T. 23 N., R. 62 E., Secs. 1 and 2; Sec. 3, Lots 1 and 2, S1/2NE1/4 and SE1/4.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 10, NE1/4 and E1/2SE1/4; Secs. 11 thru 13.
NV-18-12-130	T. 23 N., R. 62 E., Sec. 15, NE1/4NE1/4; Sec. 22, SE1/4SE1/4; Sec. 27, E1/2NE1/4, SW1/4NW1/4, NW1/4SW1/4 and E1/2SE1/4.
NV-18-12-131	T. 23 N., R. 62 E., Entire Parcel
NV-18-12-132	T. 23 N., R. 62 E., Entire Parcel
NV-18-12-133	T. 24 N., R. 62 E., Sec. 23, SE1/4SE1/4.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 34, NE1/4NE1/4, S1/2NE1/4 and SE1/4; Sec. 35, W1/2 and SE1/4.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 11, NE1/4NE1/4 and S1/2NE1/4; Sec. 12, W1/2NW1/4, SE1/4NW1/4 and SW1/4.
NV-18-12-136	T. 22 N., R. 63 E., Sec. 5, W1/2SW1/4.
NV-18-12-137	T. 22 N., R. 63 E., Sec. 6; Sec. 8, W1/2NW1/4, SE1/4NW1/4, SW1/4, NW1/4SE1/4 and S1/2SE1/4.
NV-18-12-138	T. 22 N., R. 63 E., Secs. 7, 8 and 19; Sec. 30, NE1/4, N1/2NW1/4, SE1/4NW1/4 and NE1/4SE1/4.
NV-18-12-139	T. 22 N., R. 63 E., Sec. 15, SW1/4SW1/4; Sec. 16, S1/2NE1/4, W1/2 and SE1/4.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NW1/4NE1/4 and W1/2; Sec. 14, Lots 1, 7 and 15, and E1/2NE1/4; Sec. 24, N1/2NW1/4.
NV-18-12-141	T. 22 N., R. 63 E., Secs. 17 and 20; Sec. 29, N1/2, N1/2SW1/4 and SE1/4.
NV-18-12-142	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, W1/2NW1/4, SW1/4 and E1/2SE1/4; Secs. 27 and 34.
NV-18-12-146	T. 22 N., R. 63 E., Sec. 32, E1/2 and E1/2SW1/4.
NV-18-12-148	T. 23 N., R. 63 E., Sec. 3, Lots 1 and 2, S1/2NE1/4 and NE1/4SE1/4.

NV-18-12-151	T. 23 N., R. 63 E., Sec. 19, Lots 1 thru 3, and SE1/4SW1/4.
NV-18-12-153	T. 23 N., R. 63 E., Sec. 30, Lots 1 thru 4, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, Lots 1 thru 4, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-156	T. 24 N., R. 63 E., Sec. 10, NW1/4SW1/4.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14, NE1/4SE1/4 and S1/2SE1/4; Sec. 23, W1/2NE1/4, SW1/4 and W1/2SE1/4; Sec. 26, NW1/4 and SW1/4SW1/4; Sec. 35, W1/2NW1/4, SE1/4NW1/4 and SW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 27, E1/2NE1/4 and SE1/4; Sec. 34, E1/2, E1/2NW1/4 and E1/2SW1/4.
NV-18-12-159	T. 24 N., R. 63 E., Sec. 16, N1/2, SW1/4 and W1/2SE1/4; Sec. 21, NW1/4NE1/4, NW1/4 and NW1/4SW1/4.
NV-18-12-160	T. 24., R. 63 E., Sec. 17, S1/2NE1/4, NW1/4, NE1/4SW1/4 and SE1/4; Sec. 20, Lot 1, E1/2, N1/2SW1/4 and SE1/4SW1/4.
NV-18-12-161	T. 24 N., R. 63 E., Sec. 29, Lot 1, NW1/4NE1/4, NE1/4NW1/4, S1/2NW1/4 and NW1/4SW1/4; Sec. 30, Lot 6, SE1/4NE1/4, NE1/4SE1/4 and S1/2SE1/4; Sec. 31, Lots 1 and 2, and E1/2NW1/4.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1; Sec. 12, E1/2, E1/2NW1/4, NE1/4SW1/4 and S1/2SW1/4; Sec. 13, N1/2NE1/4 and SE1/4NE1/4; Sec. 24, SE1/4SE1/4; Sec. 25, N1/2NE1/4, SW1/4NE1/4, SE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4 and NW1/4SE1/4.
NV-18-12-163	T. 24 N., R. 65 E., Sec. 35, SE1/4NE1/4 and E1/2SE1/4; Sec. 36, W1/2NW1/4.
NV-18-12-164	T. 24 N., R. 66 E., Sec. 1, NE1/4SE1/4 and S1/2SE1/4; Sec. 3, NW1/4NW1/4; Sec. 4, N1/2NE1/4 and N1/2NW1/4.
NV-18-12-165	T. 24 N., R. 66 E., Sec. 5, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and W1/2SE1/4; Secs. 6 and 7; Sec. 8, W1/2NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-166	T. 24 N., R. 66 E., Sec. 10, E1/2; Sec. 11; Sec. 12, E1/2, S1/2NW1/4 and SW1/4.

NV-18-12-167	T. 24 N., R. 66 E., Sec. 13; Sec. 14, E1/2, N1/2NW1/4 and SW1/4; Sec. 15, NE1/4SE1/4 and S1/2SE1/4.
NV-18-12-168	T. 24 N., R. 66 E., Sec. 17, NW1/4, NE1/4SW1/4 and W1/2SW1/4; Sec. 20, NW1/4NW1/4.
NV-18-12-169	T. 24 N., R. 66 E., Sec. 22, E1/2 and SW1/4; Secs. 23 and 24.
NV-18-12-170	T. 24 N., R. 66 E., Sec. 25, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 26, N1/2, E1/2SW1/4 and SE1/4; Sec. 27, N1/2NE1/4 and NE1/4NW1/4.
NV-18-12-171	T. 24 N., R. 66 E., Sec. 30, N1/2NW1/4.
NV-18-12-172	T. 24 N., R. 66 E., Sec. 35, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 36, NW1/4 and NW1/4SW1/4.
NV-18-12-187	T. 23 N., R. 67 E., Sec. 22, SE1/4SW1/4.
NV-18-12-188	T. 23 N., R. 67 E., Sec. 26, SW1/4NW1/4 and W1/2SW1/4; Sec. 27; Sec. 28, SE1/4NE1/4 and SE1/4.
NV-18-12-190	T. 23 N., R. 67 E., Sec. 33, E1/2, SE1/4NW1/4 and E1/2SW1/4; Sec. 34, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-197	T. 21 N., R. 68 E., Sec. 21, SE1/4SW1/4 and SE1/4; Sec. 22, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-198	T. 21 N., R. 68 E., Sec. 25, SW1/4 and SW1/4SE1/4; Sec. 26, SW1/4NE1/4, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 27; Sec. 28, NE1/4, NE1/4NW1/4, S1/2NW1/4, NE1/4SW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-200	T. 21 N., R. 68 E., Sec. 34, NE1/4, NE1/4NW1/4 and E1/2SE1/4; Secs. 35 and 36.

**Stipulation – Greater Sage Grouse (GRSG) Winter Habitat –
General Habitat Management Area (GHMA)
(#NV-L-16-C-TL)**

Stipulation: Timing Limitation (TL) – No surface occupancy would be allowed in GRSG winter habitat from November 1 through February 28 in GHMA.

Objective [Purpose]: To protect GRSG winter habitat.

Exception: The Authorized Officer may grant an exception where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat. An exception may also be granted if the proponent, the BLM, and the appropriate state agency negotiate mitigation that would provide a clear net conservation gain to GRSG and its habitat.

Modification: The Authorized Officer may modify the size and shape of the restricted area or the period of limitation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat.

Waiver: The Authorized Officer may waive the stipulation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the described lands do not contain GRSG or suitable habitat or are otherwise incapable of serving the requirements of GRSG and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-017	T. 22 N., R. 57 E., Sec. 29, SE1/4SE1/4.
NV-18-12-018	T. 22 N., R. 57 E., Sec. 27, SW1/4SW1/4; Sec. 28, S1/2SW1/4 and SE1/4.
NV-18-12-020	T. 22 N., R. 57 E., Sec. 32, E1/2, E1/2NW1/4, E1/2SW1/4; Sec. 33, NE1/4NE1/4, W1/2NW1/4 and NW1/4SW1/4; Sec. 34, NW1/4NW1/4.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 17, E1/2SW1/4 and W1/2NE1/4.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4; Sec. 29, NW1/4NE1/4, NW1/4 and NE1/4SW1/4.
NV-18-12-034	T. 24 N., R. 57 E., Sec. 8, SE1/4SE1/4; Sec. 9, S1/2NE1/4 and S1/2.

NV-18-12-035	T. 24 N., R. 57 E., Sec. 10, W1/2NW1/4, SE1/4NW1/4 and N1/2SW1/4.
NV-18-12-036	T. 24 N., R. 57 E., Sec. 15, SW1/4SW1/4.
NV-18-12-037	T. 24 N., R. 57 E., Sec. 16, W1/2NE1/4, SE1/4NE1/4, W1/2 and SE1/4; Sec. 21, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 28, E1/2, NE1/4NW1/4, SE1/4NW1/4 and E1/2SW1/4.
NV-18-12-038	T. 24 N., R. 57 E., Sec. 17, Lot 2, N1/2, N1/2SW1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 20, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 18; Sec. 19, Lots 1 thru 4, N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4. Sec. 30, Lots 1, 2 and 4, and NE1/4NW1/4; Sec. 31, Lots 1 and 2, SW1/4NE1/4 and E1/2NW1/4.
NV-18-12-040	T. 24 N., R. 57 E., Sec. 22, NW1/4NW1/4 and SW1/4SW1/4; Sec. 27, Lot 1, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-041	T. 24 N., R. 57 E., Sec. 34, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-042	T. 25 N., R. 57 E., Entire Parcel.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 15, E1/2; Sec. 22, E1/2NE1/4 and NE1/4SE1/4; Sec. 23; Sec. 24, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, W1/2NE1/4, NW1/4, NE1/4SW1/4 and NW1/4SE1/4; Sec. 26, N1/2NE1/4, SE1/4NE1/4 and NE1/4NW1/4.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, SW1/4NE1/4, S1/2NW1/4 and N1/2; Secs. 22, 27 and 28.
NV-18-12-051	T. 21 N., R. 58 E., Sec. 16, S1/2NE1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4; Sec. 20, NE1/4NE1/4, S1/2NE1/4, SE1/4SW1/4 and SE1/4; Sec. 21.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 3, S1/2SW1/4.
NV-18-12-055	T. 22 N., R. 58 E., Sec. 9; Sec. 10, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-057	T. 22 N., R. 58 E., Sec. 16, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-058	T. 22 N., R. 58 E., Sec. 30, W1/2NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-059	T. 22 N., R. 58 E., Sec. 28, S1/2SW1/4 and S1/2SE1/4.

NV-18-12-060	T. 22 N., R. 58 E., Sec. 29, SW1/4NE1/4, W1/2 and SE1/4.
NV-18-12-063	T. 23 N., R. 58 E., Sec. 17, Lot 16.
NV-18-12-066	T. 23 N., R. 58 E., Sec. 28, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-068	T. 23 N., R. 58 E., Sec. 29, Lots 1, 8, 9 and 16; Sec. 32, Lots 1, 8, 9, 15 and 16;
NV-18-12-072	T. 24 N., R. 58 E., Sec. 5, Lot 4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 6, Lots 1 thru 4, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4 and SE1/4; Sec. 8, W1/2NE1/4 and N1/2NW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 25, N1/2NW1/4 and SW1/4NW1/4; Sec. 26, SE1/4NE1/4 and N1/2SE1/4.
NV-18-12-081	T. 25 N., R. 58 E., Sec. 1; Sec. 2, Lot 1, SE1/4NE1/4, NE1/4SE1/4 and S1/2SE1/4.
NV-18-12-082	T. 25 N., R. 58 E., Sec. 4, Lots 2 thru 4, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4 and N1/2SE1/4; Sec. 5, Lot 1, SE1/4NE1/4, NE1/4SE1/4, S1/2SW1/4 and SE1/4.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Sec. 8, N1/2NE1/4, SW1/4NE1/4, NW1/4 and NW1/4SW1/4; Sec. 9, NW1/4NW1/4.
NV-18-12-084	T. 25 N., R. 58 E., Sec. 11, NE1/4 and N1/2SE1/4; Sec. 12; Sec. 13, NE1/4, NE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-086	T. 25 N., R. 58 E., Sec. 18, Lots 1 thru 4, NW1/4NE1/4, NE1/4NW1/4 and SE1/4NW1/4.
NV-18-12-087	T. 25 N., R. 58 E., Sec. 24., NE1/4NE1/4.
NV-18-12-090	T. 25 N., R. 58 E., Sec. 31, NE1/4SE1/4 and S1/2SE1/4; Sec. 32, SW1/4SW1/4.
NV-18-12-091	T. 16 N., R. 59 E., Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-092	T. 16 N., R. 59 E., Sec. 11, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 14, W1/2NE1/4, NW1/4, N1/2SW1/4 and NW1/4SE1/4.
NV-18-12-098	T. 23 N., R. 59 E., Sec. 10, E1/2NE1/4 and NE1/4SE1/4; Sec. 15, NW1/4NE1/4.
NV-18-12-102	T. 25 N., R. 59 E., Sec. 19, Lot 1.

NV-18-12-105	T. 15 N., R. 60 E., Sec. 1, E1/2NE1/4 and E1/2 SE1/4.
NV-18-12-106	T. 15 N., R. 60 E., Sec. 15, W1/2 and SW1/4SE1/4; Sec. 22.
NV-18-12-107	T. 15 N., R. 60 E., Sec. 12, E1/2NE1/4 and E1/2 SE1/4; Sec. 13, E1/2, SE1/4NW1/4, NE1/4SW1/4 and S1/2SW1/4.
NV-18-12-108	T. 15 N., R. 60 E., Sec. 16, E1/2; Sec. 17, SW1/4SW1/4; Sec. 20, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 21, E1/2, E1/2NW1/4 and SW1/4.
NV-18-12-109	T. 15 N., R. 60 E., Sec. 19, N1/2, N1/2SE1/4 and SE1/4SE1/4; Sec. 28, N1/2, NE1/4SW1/4, S1/2SW1/4 and SE1/4; Sec. 29, NE1/4 and NE1/4NW1/4.
NV-18-12-110	T. 15 N., R. 60 E., Sec. 23, NE1/4NE1/4, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 24, N1/2NE1/4, NW1/4 and W1/2SW1/4; Sec. 25, S1/2NE1/4, NE1/4SW1/4 and SE1/4; Sec. 26, NW1/4NE1/4, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-111	T. 15 N., R. 60 E., Sec. 27, N1/2NE1/4, SW1/4NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-121	T. 16 N., R. 60 E., Sec. 25, Lot 4 and SW1/4SE1/4; Sec. 27, NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-122	T. 16 N., R. 60 E., Sec. 28, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 29, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Sec. 32, N1/2NE1/4 and SE1/4NE1/4; Sec. 33, N1/2 and N1/2SE1/4.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, NW1/4 and N1/2SW1/4; Sec. 36, Lots 1 thru 4, W1/2NE1/4, SE1/4SW1/4 and W1/2SE1/4.
NV-18-12-128	T. 23 N., R. 62 E., Sec. 1, Lots 1 and 2, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Sec. 2, Lots 2 thru 4, SW1/4NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4; Sec. 3, Lots 1 and 2, S1/2NE1/4 and SE1/4.
NV-18-12-129	T. 23 N., R. 63 E., Sec. 10, NE1/4 and E1/2SE1/4; Sec. 11, NW1/4NE1/4, NW1/4 and W1/2SW1/4; Sec. 12, E1/2 and NE1/4NW1/4.
NV-18-12-130	T. 23 N., R. 62 E., Sec. 27, SW1/4NW1/4 and NW1/4SW1/4.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 34, SE1/4; Sec. 35, N1/2.

NV-18-12-135	T. 22 N., R. 63 E., Sec. 11, E1/2NE1/4; Sec. 12, W1/2NW1/4 and SE1/4SW1/4.
NV-18-12-139	T. 22 N., R. 63 E., Sec. 15, SW1/4SW1/4; Sec. 16, SE1/4SE1/4.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NW1/4NE1/4, E1/2NW1/4 and NE1/4SW1/4.
NV-18-12-142	T. 22 N., R. 63 E., Sec. 21, N1/2NE1/4, SW1/4NE1/4, NE1/4SW1/4 and NW1/4SE1/4.
NV-18-12-143	T. 22 N., R. 64 E., Sec. 22, NW1/4NW1/4 and NE1/4SW1/4.
NV-18-12-151	T. 23 N., R. 63 E., Sec. 19, Lot 3 and E1/2SW1/4.
NV-18-12-153	T. 23 N., R. 63 E., Sec. 30, Lot 1, W1/2NE1/4, E1/2NW1/4, NE1/4SW1/4 and W1/2SE1/4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, E1/2NE1/4 and E1/2SE1/4; Sec. 32, SE1/4NE1/4 and W1/2SE1/4.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14, NE1/4SE1/4 and S1/2SE1/4; Sec. 23, W1/2NE1/4, SW1/4 and W1/2SE1/4; Sec. 26, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 27, E1/2NE1/4 and SE1/4.
NV-18-12-159	T. 24 N., R. 63 E., Sec. 16, NE1/4NE1/4, SW1/4NE1/4, SE1/4SW1/4 and W1/2SE1/4; Sec. 21, NW1/4NE1/4 and NE1/4NW1/4.
NV-18-12-161	T. 24 N., R. 63 E., Sec. 29, NW1/4SW1/4; Sec. 30, NE1/4SE1/4 and S1/2SE1/4; Sec. 31, Lot 2 and SE1/4NW1/4.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 24, SE1/4SE1/4; Sec. 25, N1/2NE1/4 and SW1/4NE1/4.
NV-18-12-164	T. 24 N., R. 66 E., Sec. 3, NW1/4NW1/4; Sec. 4, N1/2NE1/4 and N1/2NW1/4.
NV-18-12-165	T. 24 N., R. 66 E., Sec. 5, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and W1/2SE1/4. Sec. 6, E1/2NE1/4; Sec. 8, W1/2NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-166	T. 24 N., R. 66 E., Sec. 10, E1/2NE1/4 and E1/2SE1/4; Sec. 11; Sec. 12, NE1/4, N1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 13, NW1/4NW1/4; Sec. 14, NE1/4, N1/2NW1/4, SW1/4 and NW1/4SE1/4; Sec. 15, NE1/4SE1/4 and S1/2SE1/4.

NV-18-12-168	T. 24 N., R. 66 E., Sec. 17, NW1/4, N1/2SW1/4 and SW1/4SW1/4; Sec. 20, NW1/4NW1/4.
NV-18-12-169	T. 24 N., R. 66 E., Sec. 22, E1/2 and SW1/4; Sec. 23, W1/2.
NV-18-12-170	T. 24 N., R. 66 E., Sec. 26, SW1/4NE1/4, NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-171	T. 24 N., R. 66 E., Sec. N1/2NW1/4.
NV-18-12-172	T. 24 N., R. 66 E., Sec. 35, E1/2, E1/2NW1/4 and E1/2SW1/4.
NV-18-12-174	T. 21 N., R. 67 E., Sec. 5, W1/2NW1/4 and NW1/4SW1/4; Sec. 6, NE1/4, NE1/4NW1/4 and NE1/4SE1/4.
NV-18-12-187	T. 23 N., R. 67 E., Sec. 22, SE1/4NE1/4, E1/2SW1/4 and SE1/4; Sec. 23, SW1/4NW1/4 and SW1/4.
NV-18-12-188	T. 23 N., R. 67 E., Sec. 26, NW1/4 and W1/2SW1/4; Sec. 27, E1/2, E1/2NW1/4, SW1/4NW1/4 and SW1/4; Sec. 28, SE1/4NE1/4 and SE1/4.
NV-18-12-190	T. 23 N., R. 67 E., Sec. 33, E1/2 and E1/2SW1/4; Sec. 34, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and NW1/4SE1/4.
NV-18-12-197	T. 21 N., R. 68 E., Sec. 21, SE1/4SW1/4 and SE1/4; Sec. 33, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-198	T. 21 N., R. 68 E., Sec. 25, SW1/4 and SW1/4SE1/4; Sec. 26, SW1/4NE1/4, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 27; Sec. 28, NE1/4, E1/2NW1/4, NE1/4SW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-200	T. 21 N., R. 68 E., Sec. 34, NE1/4, NE1/4NW1/4 and E1/2SE1/4; Secs. 35 and 36.

**Stipulation – Greater Sage Grouse (GRSG) Early Brood-rearing Habitat –
General Habitat Management Area (GHMA)
(#NV-L-16-D-TL)**

Stipulation: Timing Limitation (TL) - No surface occupancy would be allowed in GRSG early brood-rearing habitat from May 15 through June 15 in GHMA.

Objective [Purpose]: To protect GRSG early brood rearing habitat.

Exception: The Authorized Officer may grant an exception where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat. An exception may also be granted if the proponent, the BLM, and the appropriate state agency negotiate mitigation that would provide a clear net conservation gain to GRSG and its habitat.

Modification: The Authorized Officer may modify the size and shape of the restricted area or the period of limitation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat.

Waiver: The Authorized Officer may waive the stipulation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the described lands do not contain GRSG or suitable habitat or are otherwise incapable of serving the requirements of GRSG and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-013	T. 22 N., R. 57 E., Sec. 6, Lot 1 and SE1/4NE1/4; Sec. 5, Lot 4.
NV-18-12-014	T. 22 N., R. 57 E., Sec. 17, S1/2NE1/4 and SW1/4; Sec. 18, SE1/4NE1/4, S1/2SW1/4 and SE1/4.
NV-18-12-016	T. 22 N., R. 57 E., Sec. 19, Lot 1, NW1/4NE1/4 and NE1/4NW1/4.
NV-18-12-017	T. 22 N., R. 57 E., Sec. 29, SE1/4NE1/4 and SE1/4.
NV-18-12-018	T. 22 N., R. 57 E., Sec. 21, SE1/4SE1/4; Sec. 22, SW1/4SW1/4; Sec. 27, W1/2; Sec. 28, S1/2NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-019	T. 22 N., R. 57 E., Sec. 25, E1/2SW1/4 and SE1/4.

NV-18-12-020	T. 22 N., R. 57 E., Sec. 32, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 33, NE1/4NE1/4, W1/2NW1/4 and NW1/4SW1/4.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, SW1/4NW1/4 and W1/2SW1/4; Sec. 6, Lot 7, SE1/4SW1/4 and SW1/4SE1/4; Sec. 7, Lots 1 thru 4, NE1/4, E1/2NW1/4, NE1/4SW1/4 and E1/2SE1/4.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 8, S1/2NW1/4 and SW1/4; Sec. 17, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-027	T. 23 N., R. 57 E., Sec. 18, Lot 2, NE1/4 and E1/2NW1/4.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 29, W1/2NE1/4, NW1/4, NE1/4SW1/4 and SW1/4SE1/4.
NV-18-12-031	T. 23 N., R. 57 E., Sec. 32, W1/2NE1/4, SE1/4NW1/4, SW1/4 and NW1/4SE1/4.
NV-18-12-034	T. 24 N., R. 57 E., Sec. 8, S1/2NE1/4, S1/2SW1/4 and SE1/4; Sec. 9.
NV-18-12-035	T. 24 N., R. 57 E., Sec. 10, W1/2NW1/4, SE1/4NW1/4 and N1/2SW1/4.
NV-18-12-036	T. 24 N., R. 57 E., Sec. 15, SW1/4SW1/4.
NV-18-12-037	T. 24 N., R. 57 E., Sec. 16, W1/2NE1/4, SE1/4NE1/4, W1/2 and SE1/4; Sec. 21, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 28, NE1/4, N1/2NW1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Sec. 33, NE1/4 and N1/2SE1/4.
NV-18-12-038	T. 24 N., R. 57 E., Sec. 17, Lot 2, N1/2, N1/2SW1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 20, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 18; Sec. 19, Lots 1 thru 4, N1/2NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4; Sec. 30, Lots 1, 2 and 4, and NE1/4NW1/4; Sec. 31, Lots 1 and 2, SW1/4NE1/4, E1/2NW1/4.
NV-18-12-040	T. 24 N., R. 57 E., Sec. 22, W1/2NW1/4, NE1/4SW1/4, S1/2SW1/4 and N1/2SE1/4; Sec. 23, SW1/4 and SW1/4SE1/4; Sec. 26, W1/2NE1/4, E1/2NW1/4 and NE1/4SW1/4; Sec. 27, Lot 1 and SW1/4.
NV-18-12-041	T. 24 N., R. 57 E., Sec. 34, W1/2NE1/4, NW1/4, N1/2SW1/4 and NW1/4SE1/4.
NV-18-12-042	T. 25 N., R. 57 E., Entire Parcel.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 15, E1/2; Sec. 22, E1/2NE1/4 and NE1/4SE1/4; Sec. 23;

	Sec. 24, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, W1/2NE1/4, NW1/4 NE1/4SW1/4 and NW1/4SE1/4; Sec. 26, NE1/4 and NE1/4NW1/4.
NV-18-12-046	T. 25 N., R. 57 E., Sec. 36, N1/2NE1/4 and E1/2SE1/4.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 1 thru 3, S1/2NE1/4 and SE1/4NW1/4; Sec. 3, S1/2SW1/4.
NV-18-12-055	T. 22 N., R. 58 E., Sec. 9; Sec. 10, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-057	T. 22 N., R. 58 E., Sec. 16, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-059	T. 22 N., R. 58 E., Sec. 28, S1/2SW1/4 and S1/2SE1/4.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 29, SW1/4NE1/4, N1/2NW1/4, SE1/4NW1/4 and S1/2.
NV-18-12-061	T. 23 N., R. 58 E., Sec. 2, Lot 4, SW1/4NW1/4 and W1/2SW1/4; Sec. 3, Lot 1, S1/2NE1/4, SE1/4NW1/4 and S1/2; Sec. 4, W1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-062	T. 23 N., R. 58 E., Sec. 5, Lot 19; Sec. 7, Lot 20.
NV-18-12-063	T. 23 N., R. 58 E., Sec. 8, Lots 1, 2, 8, and 9, and lots 15 and 16; Sec. 17; Sec. 18, Lots 5 and 6, lots 11 thru 14, and lot 20.
NV-18-12-064	T. 23 N., R. 58 E., Sec. 9, N1/2, SW1/4 and NW1/4SE1/4; Sec. 10, N1/2NE1/4, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-066	T. 23 N., R. 58 E., Sec. 28, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-067	T. 23 N., R. 58 E., Sec. 36, SE1/4SE1/4.
NV-18-12-068	T. 23 N., R. 58 E., Sec. 29, Lots 1 thru 3, lots 6 thru 11, and lots 14 thru 16; Sec. 32, Lots 1 and 2, lots 6 thru 11, and lots 14 thru 16.
NV-18-12-072	T. 24 N., R. 58 E., Sec. 5, Lot 4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 6, Lots 1 thru 4, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 8, W1/2NE1/4 and N1/2NW1/4.
NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2SE1/4; Sec. 10, NW1/4SW1/4.

NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, NE1/4SE1/4 and S1/2SE1/4; Sec. 25, W1/2NE1/4, NW1/4, NW1/4SW1/4, W1/2SE1/4 and SE1/4SE1/4; Sec. 26, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 34, E1/2SE1/4; Sec. 35, W1/2NE1/4 and W1/2.
NV-18-12-081	T. 25 N., R. 58 E., Sec. 1; Sec. 2, Lot 1, SE1/4NE1/4, NE1/4SE1/4 and S1/2SE1/4; Sec. 3, Lots 3 and 4, S1/2NW1/4 and NW1/4SW1/4.
NV-18-12-082	T. 25 N., R. 58 E., Sec. 4, Lots 1 thru 4, S1/2SE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 5, Lot 1, SE1/4NE1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4; Sec. 6, SE1/4SE1/4.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, E1/2, SE1/4NW1/4 and E1/2SW1/4; Sec. 8, N1/2NE1/4, SW1/4NE1/4, NW1/4 and NW1/4SW1/4; Sec. 9, NW1/4NW1/4.
NV-18-12-084	T. 25 N., R. 58 E., Sec. 11, NE1/4 and N1/2SE1/4; Sec. 12; Sec. 13, NE1/4, NE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-086	T. 25 N., R. 58 E., Sec. 18, Lots 1 thru 3, NW1/4NE1/4 and E1/2NW1/4.
NV-18-12-087	T. 25 N., R. 58 E., Sec. 24, NE1/4NE1/4 and SE1/4SE1/4.
NV-18-12-088	T. 25 N., R. 58 E., Sec. 25, NE1/4, S1/2NW1/4, N1/2SW1/4 and NW1/4SE1/4; Sec. 26, NE1/4SE1/4 and S1/2SE1/4; Sec. 35, N1/2NE1/4.
NV-18-12-090	T. 25 N., R. 58 E., Sec. 31, Lots 3 and 4, S1/2NE1/4, SE1/4SW1/4 and SE1/4; Sec. 32, SW1/4SW1/4.
NV-18-12-091	T. 16 N., R. 59 E., Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/4NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-092	T. 16 N., R. 59 E., Sec. 11, W1/2NE1/4, W1/2 and W1/2SE1/4.
NV-18-12-096	T. 17 N., R. 59 E., Sec. 25, SE1/4SE1/4; Sec. 36, NE1/4, SE1/4NW1/4, E1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4
NV-18-12-098	T. 23 N., R. 59 E., Sec. 10, SE1/4NE1/4 and NE1/4SE1/4; Sec. 15, W1/2NE1/4.
NV-18-12-102	T. 25 N., R. 59 E., Sec. 19, Lot 1.
NV-18-12-104	T. 25 N., R. 59 E., Sec. 30, Lot 1.

NV-18-12-125	T. 22 N., R. 62 E., Sec. 1, Lot 1 and SE1/4NE1/4.
NV-18-12-126	T. 22 N., R. 62 E., Sec. 2, SE1/4NW1/4.
NV-18-12-127	T. 22 N., R. 62 E., Sec. 15, SE1/4NE1/4.
NV-18-12-128	T. 23 N., R. 62 E., Sec. 1, Lots 1 and 4, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 3, Lots 1 and 2, S1/2NE1/4 and SE1/4.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 10, NE1/4 and E1/2SE1/4; Sec. 11, E1/2NW1/4 and E1/2SW1/4; Sec. 12, Lot 1, E1/2, N1/2NW1/4 and SE1/4NW1/4; Sec. 13, Lots 1 and 2, N1/2NE1/4, SE1/4NE1/4, NE1/4NW1/4, S1/2NW1/4, NE1/4SW1/4 and SE1/4.
NV-18-12-130	T. 23 N., R. 62 E., Sec. 15, NE1/4NE1/4; Sec. 22, SE1/4SE1/4; Sec. 27, E1/2NE1/4, SW1/4NW1/4 and NW1/4SW1/4.
NV-18-12-131	T. 23 N., R. 62 E., Sec. 23, N1/2NW1/4, SW1/4NW1/4 and W1/2SW1/4; Sec. 26, W1/2NW1/4.
NV-18-12-132	T. 23 N., R. 62 E., Sec. 24, E1/2NE1/4; Sec. 25, NE1/4SW1/4, S1/2SW1/4 and SW1/4SE1/4; Sec. 36, N1/2, NE1/4SW1/4 and SE1/4.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 34, S1/2SE1/4; Sec. 35, S1/2NW1/4 and S1/2.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 11, NE1/4NE1/4 and S1/2NE1/4; Sec. 12, W1/2NW1/4, SE1/4NW1/4 and SW1/4.
NV-18-12-137	T. 22 N., R. 63 E., Sec. 8, W1/2NW1/4, N1/2SW1/4, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-138	T. 22 N., R. 63 E., Sec. 19, SW1/4NE1/4, W1/2, and SE1/4; Sec. 30, NW1/4NE1/4, NE1/4NW1/4 and SE1/4SE1/4.
NV-18-12-139	T. 22 N., R. 63 E., Sec. 15, SW1/4SW1/4; Sec. 16, S1/2NE1/4 and SE1/4.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NW1/4NE1/4 and W1/2; Sec. 14, Lots 1, 7 and 15, and E1/2NE1/4; Sec. 24, N1/2NW1/4.
NV-18-12-141	T. 22 N., R. 63 E., Sec. 20, NE1/4NE1/4, S1/2NE1/4, N1/2SE1/4 and NE1/4SE1/4; Sec. 29, S1/2SW1/4.

NV-18-12-142	T. 22 N., R. 63 E., Sec. 21; Sec. 28, N1/2NE1/4 and NE1/4NW1/4.
NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, W1/2NW1/4, SE1/4NW1/4, NE1/4SW1/4 and W1/2SE1/4; Sec. 27, NE1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 34, E1/2NE1/4, NE1/4SE1/4 and S1/2SE1/4.
NV-18-12-146	T. 22 N., R. 63 E., Sec. 32, NW1/4NW1/4.
NV-18-12-148	T. 23 N., R. 63 E., Sec. 3, Lots 1 and 2, S1/2NE1/4 and NE1/4SE1/4.
NV-18-12-151	T. 23 N., R. 63 E., Sec. 19, Lots 1 thru 3, E1/2SW1/4.
NV-18-12-153	T. 23 N., R. 63 E., Sec. 30, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, Lots 1 thru 4, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14, NE1/4SE1/4 and S1/2SE1/4; Sec. 23, W1/2NE1/4, SW1/4 and W1/2SE1/4; Sec. 26, NW1/4 and SW1/4SW1/4; Sec. 35, W1/2NW1/4, SE1/4NW1/4 and SW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 27, E1/2NE1/4 and SE1/4; Sec. 34, E1/2, E1/2NW1/4 and E1/2SW1/4.
NV-18-12-159	T. 24 N., R. 63 E., Sec. 16, NE1/4, SE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4 and W1/2SE1/4; Sec. 21, NW1/4 and NW1/4SW1/4.
NV-18-12-160	T. 24 N., R. 63 E., Sec. 17, SE1/4SE1/4; Sec. 20, E1/2NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-161	T. 24 N., R. 63 E., Sec. 29, Lot 1, NW1/4NE1/4, NE1/4NW1/4, S1/2NW1/4 and NW1/4SW1/4; Sec. 30, Lot 6, SE1/4NE1/4, NE1/4SE1/4 and S1/2SE1/4; Sec. 31, Lot 1 and NE1/4NW1/4.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1, Lots 1 thru 4, and SE1/4NW1/4; Sec. 12, SW1/4SW1/4.
NV-18-12-165	T. 24 N., R. 66 E., Sec. 5, N1/2NW1/4, SW1/4NW1/4, N1/2SW1/4 and NW1/4SE1/4; Sec. 6, N1/2NE1/4 and SE1/4SE1/4.
NV-18-12-166	T. 24 N., R. 66 E., Sec. 10, E1/2; Sec. 11; Sec. 12, NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 13, NW1/4NW1/4; Sec. 14, NE1/4, N1/2NW1/4, SW1/4 and NW1/4SE1/4. Sec. 15, NE1/4SE1/4 and S1/2SE1/4.

NV-18-12-169	T. 24 N., R. 66 E., Sec. 22, E1/2; Sec. 23, NW1/4 and W1/2SW1/4.
NV-18-12-170	T. 24 N., R. 66 E., Sec. 26, NW1/4NW1/4; Sec. 27, N1/2NE1/4 and NE1/4NW1/4.
NV-18-12-174	T. 21 N., R. 67 E., Sec. 6, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 7, E1/2, E1/2NW1/4 and E1/2SW1/4.
NV-18-12-177	T. 21 N., R. 67 E., Sec. 18, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 19, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4 and NW1/4SE1/4.
NV-18-12-187	T. 23 N., R. 67 E., Sec. 22, SE1/4NE1/4, E1/2SW1/4 and SE1/4; Sec. 23, SW1/4NW1/4 and SW1/4.
NV-18-12-188	T. 23 N., R. 67 E., Sec. 26, NW1/4 and W1/2SW1/4; Sec. 27, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 28, SE1/4NE1/4 and SE1/4.
NV-18-12-190	T. 23 N., R. 67 E., Sec. 33, E1/2 and E1/2SW1/4; Sec. 34, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and NW1/4SE1/4.
NV-18-12-200	T. 21 N., R. 68 E., Sec. 36, SE1/4SW1/4 and SW1/4SE1/4.
NV-18-12-206	T. 12 N., R. 57 E., Sec. 10, NE1/4NE1/4; Sec. 11, N1/2NE1/4, SW1/4NE1/4, N1/2NW1/4 and SE1/4NW1/4; Sec. 14, NE1/4SE1/4 and S1/2SE1/4.

**Stipulation – Greater Sage Grouse (GRSG) Late Brood-rearing Habitat –
General Habitat Management Area (GHMA)
(#NV-L-16-D-TL)**

Stipulation: Timing Limitation (TL) -No surface occupancy would be allowed in GRSG late brood-rearing habitat from June 15 through September 15 in GHMA.

Objective [Purpose]: To protect GRSG late brood rearing habitat.

Exception: The Authorized Officer may grant an exception where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat. An exception may also be granted if the proponent, the BLM, and the appropriate state agency negotiate mitigation that would provide a clear net conservation gain to GRSG and its habitat.

Modification: The Authorized Officer may modify the size and shape of the restricted area or the period of limitation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the action, as proposed or otherwise restricted, does not adversely affect GRSG or its habitat.

Waiver: The Authorized Officer may waive the stipulation where an environmental review and consultation with the appropriate state agency (Nevada Department of Wildlife, Sagebrush Ecosystem Technical Team, California Department of Fish and Wildlife) determines that the described lands do not contain GRSG or suitable habitat or are otherwise incapable of serving the requirements of GRSG and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-014	T. 22 N., R. 57 E., Sec. 17, SW1/4NW1/4 and NW1/4SW1/4; Sec. 18, Lot 4, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-016	T. 22 N., R. 57 E., Sec. 19, Lot 1 and NE1/4NW1/4.
NV-18-12-017	T. 22 N., R. 57 E., Sec. 29, SE1/4NE1/4 and SE1/4.
NV-18-12-018	T. 22 N., R. 57 E., Sec. 27, SW1/4NE1/4, W1/2 and NW1/4SE1/4; Sec. 28, NE1/4NE1/4, S1/2NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-019	T. 22 N., R. 57 E., Sec. 25, E1/2SW1/4 and SE1/4.
NV-18-12-020	T. 22 N., R. 57 E., Sec. 32, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 33, NE1/4NE1/4, W1/2NW1/4 and NW1/4SW1/4; Sec. 34, NW1/4NW1/4.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, SW1/4SW1/4;

	Sec. 6, Lot 7, SE1/4SW1/4, SW1/4SE1/4 and SE1/4SE1/4; Sec. 7, Lots 1 thru 3, NE1/4, E1/2NW1/4, NE1/4SW1/4 and SE1/4SE1/4.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 8, SE1/4NW1/4 and SW1/4; Sec. 17, N1/2NW1/4, E1/2SW1/4 and W1/2SE1/4;
NV-18-12-027	T. 23 N., R. 57 E., Sec. 18, NE1/4 and SE1/4NW1/4.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, E1/2, E1/2NW1/4, NE1/4SW1/4 and S1/2SW1/4; Sec. 29, W1/2NE1/4, NW1/4 and NE1/4SW1/4.
NV-18-12-034	T. 24 N., R. 57 E., Sec. 8, S1/2NE1/4, S1/2SW1/4 and SE1/4; Sec. 9, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4.
NV-18-12-035	T. 24 N., R. 57 E., Sec. 10, NW1/4NW1/4, S1/2NW1/4 and N1/2SW1/4.
NV-18-12-036	T. 24 N., R. 57 E., Sec. 15, SW1/4SW1/4.
NV-18-12-037	T. 24 N., R. 57 E., Sec. 16, NW1/4NE1/4, S1/2NE1/4, W1/2 and SE1/4; Sec. 21, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 28, E1/2, N1/2NW1/4, SE1/4NW1/4 and E1/2SW1/4; Sec. 33, NE1/4 and N1/2SE1/4.
NV-18-12-038	T. 24 N., R. 57 E., Sec. 17, Lot 2, N1/2, N1/2SW1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 20, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 18, Lots 3 and 4, E1/2 and E1/2SW1/4; Sec. 19, Lots 1 thru 4, N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-040	T. 24 N., R. 57 E., Sec. 22, W1/2NW1/4, NE1/4SW1/4, S1/2SW1/4 and N1/2SE1/4. Sec. 23, SW1/4 and SW1/4SE1/4; Sec. 26, W1/2NE1/4, E1/2NW1/4 and NE1/4SW1/4; Sec. 27, Lot 1, SW1/4 and W1/2SE1/4.
NV-18-12-041	T. 24 N., R. 57 E., Sec. 34, W1/2NE1/4, NW1/4, N1/2SW1/4 and NW1/4SE1/4.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 15, E1/2; Sec. 22, E1/2NE1/4 and NE1/4SE1/4; Sec. 23; Sec. 24, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, W1/2NE1/4, NW1/4, NE1/4SW1/4, W1/2SE1/4 and SE1/4SE1/4. Sec. 26, NE1/4 and NE1/4NW1/4.
NV-18-12-046	T. 25 N., R. 57 E., Sec. 36, N1/2NE1/4, SE1/4NE1/4 and E1/2SE1/4.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, SW1/4NE1/4, S1/2NW1/4 and S1/2; Secs. 22 and 27; Sec. 28, E1/2, S1/2NW1/4 and SW1/4.

NV-18-12-051	T. 21 N., R. 58 E., Sec. 16, S1/2NE1/4, N1/2SE1/4 and SE1/4SE1/4; Sec. 21, E1/2NE1/4 and NE1/4SE1/4.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 1 and 2, S1/2NE1/4 and SE1/4NW1/4; Sec. 3, S1/2SW1/4.
NV-18-12-055	T. 22 N., R. 58 E., Sec. 9; Sec. 10, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-057	T. 22 N., R. 58 E., Sec. 16, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-058	T. 22 N., R. 58 E., Sec. 30, Lots 3 and 4, E1/2NE1/4, E1/2SW1/4, and SE1/4.
NV-18-12-059	T. 22 N., R. 58 E., Sec. 28, S1/2SW1/4 and S1/2SE1/4.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 29, SW1/4NE1/4, W1/2 and SE1/4.
NV-18-12-061	T. 23 N., R. 58 E., Sec. 2, Lot 4, SW1/4NW1/4 and W1/2SW1/4; Sec. 3, Lot 1, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 4, S1/2NE1/4 and S1/2.
NV-18-12-062	T. 23 N., R. 58 E., Sec. 5, Lot 19; Sec. 7, Lot 20.
NV-18-12-063	T. 23 N., R. 58 E., Sec. 8, Lots 1 and 2, lots 7 thru 10, and lots 13 thru 16; Sec. 17; Sec. 18, Lots 5 and 6, lots 11 thru 14, and lots 18 thru 20.
NV-18-12-064	T. 23 N., R. 58 E., Sec. 9, N1/2, SW1/4 and NW1/4SE1/4; Sec. 10, N1/2NE1/4, N1/2NW1/4 and SW1/4NW1/4.
NV-18-12-066	T. 23 N., R. 58 E., Sec. 28, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-067	T. 23 N., R. 58 E., Sec. 36, SE1/4SE1/4.
NV-18-12-068	T. 23 N., R. 58 E., Sec. 29, Lots 1 thru 3, lots 6 thru 11, and lots 15 and 16; Sec. 32, Lots 1 and 2, lots 7 thru 10, and lots 5 and 16.
NV-18-12-071	T. 24 N., R. 58 E., Sec. 1, W1/2SW1/4; Sec. 2, Lot 3, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, SW1/4SW1/4, NW1/4SE1/4 and SE1/4SE1/4.
NV-18-12-072	T. 24 N., R. 58 E., Sec. 3, SE1/4SE1/4; Sec. 5, Lot 4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-073	T. 23 N., R. 58 E., Sec. 6, Lots 1 thru 4, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4 and SE1/4; Sec. 8, W1/2NE1/4 and N1/2NW1/4.

NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2SE1/4; Sec. 10, NE1/4NE1/4, SW1/4NW1/4 and NW1/4SW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, NE1/4SE1/4 and S1/2SE1/4; Sec. 25, N1/2 and SE1/4; Sec. 26, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 34, E1/2SE1/4; Sec. 35, W1/2NE1/4 and W1/2.
NV-18-12-081	T. 25 N., R. 58 E., Sec. 1; Sec. 2, Lot 1, SE1/4NE1/4, NE1/4SE1/4 and S1/2SE1/4; Sec. 3, Lots 3 and 4, S1/2NE1/4 and NW1/4SW1/4.
NV-18-12-082	T. 25 N., R. 58 E., Sec. 4, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 5, Lot 1, SE1/4NE1/4, NE1/4SW1/4, S1/2SW1/4 and NE1/4; Sec. 6, SE1/4SE1/4.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 8, N1/2NE1/4, SW1/4NE1/4, NW1/4 and NW1/4SW1/4; Sec. 9, NW1/4NW1/4.
NV-18-12-084	T. 25 N., R. 58 E., Sec. 11, NE1/4 and N1/2SE1/4; Sec. 12; Sec. 13, NE1/4, NE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-086	T. 25 N., R. 58 E., Sec. 18, Lots 1 thru 3, NW1/4NE1/4 and E1/2NW1/4.
NV-18-12-087	T. 25 N., R. 58 E., Sec. 24, NE1/4NE1/4.
NV-18-12-088	T. 25 N., R. 58 E., Sec. 25, NE1/4, S1/2NW1/4, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 26, NE1/4SE1/4 and S1/2SE1/4; Sec. 35, E1/2, SE1/4NW1/4 and E1/2SW1/4; Sec. 36, NW1/4NW1/4 and SW1/4SW1/4.
NV-18-12-090	T. 25 N., R. 58 E., Sec. 30, Lot 4 and SE1/4SW1/4; Sec. 31, Lots 1 thru 4, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4; Sec. 32, SW1/4W1/4.
NV-18-12-091	T. 16 N., R. 59 E., Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-092	T. 16 N., R. 59 E., Sec. 11, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 14, W1/2NE1/4, NW1/4, N1/2SW1/4 and NW1/4SE1/4.
NV-18-12-096	T. 17 N., R. 59 E., Sec. 25, SE1/4SE1/4; Sec. 36, E1/2, SE1/4NW1/4 and E1/2SW1/4.

NV-18-12-098	T. 23 N., R. 59 E., Sec. 10, E1/2NE1/4 and NE1/4SE1/4; Sec. 15, W1/2NE1/4.
NV-18-12-102	T. 25 N., R. 59 E., Sec. 19, Lots 1, 3 and 4, and SE1/4SW1/4.
NV-18-12-104	T. 25 N., R. 59 E., Sec. 30, Lots 1 and 2, and NE1/4NW1/4.
NV-18-12-105	T. 15 N., R. 60 E., Sec. 1, E1/2NE1/4 and NE1/4SE1/4.
NV-18-12-106	T. 15 N., R. 60 E., Sec. 10, SW1/4NE1/4, SE1/4NW1/4 and S1/2; Sec. 15, W1/2NE1/4 and W1/2; Sec. 22, NW1/4NW1/4.
NV-18-12-108	T. 15 N., R. 60 E., Sec. 16, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 17, SW1/4SW1/4; Sec. 20, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 21, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-109	T. 15 N., R. 60 E., Sec. 19, N1/2, N1/2SW1/4 and SE1/4; Sec. 28, W1/2 and SW1/4SE1/4; Sec. 29; Sec. 30, NE1/4NE1/4.
NV-18-12-110	T. 15 N., R. 60 E., Sec. 23, SE1/4SW1/4 and SE1/4; Sec. 24, E1/2, SE1/4NW1/4 and S1/2; Secs. 25 and 26.
NV-18-12-111	T. 15 N., R. 60 E., Sec. 27, SE1/4NE1/4, SE1/4SW1/4 and SE1/4; Secs. 33 and 34;
NV-18-12-112	T. 15 N., R. 60 E., Sec. 35; Sec. 36, N1/2NE1/4, SW1/4NE1/2, W1/2 and W1/2SE1/4.
NV-18-12-114	T. 16 N., R. 60 E., Sec. 4, Lot 4; Sec. 5, Lots 1 thru 7; Sec. 6, Lots 1 thru 5, and lots 9 and 10;
NV-18-12-121	T. 16 N., R. 60 E., Sec. 27, NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-122	T. 16 N., R. 60 E., Sec. 28; Sec. 29, NE1/4NE1/4, S1/2NE1/4, SE1/4NW1/4, NE1/4SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Sec. 32, N1/2NE1/4, SE1/4NE1/4; Sec. 33, N1/2 and N1/2SE1/4.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, NW1/4 and N1/2SW1/4; Sec. 36, SE1/4SW1/4 and SW1/4SE1/4.

NV-18-12-125	T. 22 N., R. 62 E., Sec. 1, Lots 1 and 2, S1/2NE1/4 and NE1/4SE1/4; Sec. 12, W1/2SW1/4.
NV-18-12-126	T. 22 N., R. 62 E., Sec. 2, Lots 3 and 4, SE1/4NW1/4, E1/2SW1/4 and W1/2SE1/4; Sec. 11, W1/2NE1/4, SE1/4NE1/4 and SE1/4; Sec. 14, NE1/4NE1/4, NE1/4NW1/4, S1/2NW1/4 and NW1/4SW1/4.
NV-18-12-127	T. 22 N., R. 62 E., Sec. 15, SE1/4NE1/4 and NE1/4SE1/4.
NV-18-12-128	T. 23 N., R. 62 E., Secs. 1 and 2; Sec. 3, Lots 1 and 2, S1/2NE1/4 and SE1/4.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 10, NE1/4, E1/2SE1/4; Sec. 11, Lots 1 thru 4, N1/2NE1/4, W1/2NW1/4, W1/2SW1/4, and SE1/4SW1/4; Secs. 12 and 13.
NV-18-12-130	T. 23 N., R. 62 E., Sec. 15, NE1/4NE1/4; Sec. 22, SE1/4SE1/4; Sec. 27, E1/2NE1/4, SW1/4NW1/4, NW1/4SW1/4 and E1/2SE1/4; Sec. 34, E1/2NE1/4.
NV-18-12-131	T. 23 N., R. 62 E., Sec. 23, W1/2NE1/4 and W1/2; Sec. 26, W1/2NW1/4 and W1/2SW1/4; Sec. 35, W1/2NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-132	T. 23 N., R. 62 E., Sec. 24, E1/2 and E1/2NW1/4; Sec. 25, E1/2, NE1/2SW1/4 and S1/2SW1/4; Sec. 36, E1/2, N1/2NW1/4, SE1/4NW1/4 and NE1/4SW1/4.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 34, S1/2NE1/4 and SE1/4; Sec. 35, W1/2 and SE1/4.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 11, NE1/4NE1/4, S1/2NE1/4; Sec. 12, W1/2NW1/4, SE1/4NW1/4 and SW1/4.
NV-18-12-136	T. 22 N., R. 63 E., Sec. 5, W1/2SW1/4.
NV-18-12-137	T. 22 N., R. 63 E., Sec. 6; Sec. 8, W1/2NW1/4, SW1/4 and S1/2SE1/4.
NV-18-12-138	T. 22 N., R. 63 E., Sec. 7, NE1/4, NE1/4NW1/4, N1/2SE1/4 and NE1/4SE1/4; Sec. 19; Sec. 30, NE1/4, N1/2NW1/4, SE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-139	T. 22 N., R. 63 E., Sec. 15, SW1/4SW1/4; Sec. 16, S1/2NE1/4, W1/2 and SE1/4.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NE1/4NE1/4 and W1/2;

	Sec. 14, Lots 1, 7 and 15, and E1/2NE1/4; Sec. 24, N1/2NW1/4.
NV-18-12-141	T. 22 N., R. 63 E., Sec. 17, N1/2NE1/4; Sec. 20, NE1/4NE1/4, S1/2SE1/4, S1/2NW1/4 and S1/2; Sec. 29, N1/2NW1/4, SW1/4NW1/4, NW1/4SW1/4 and S1/2SW1/4.
NV-18-12-142	T. 22 N., R. 63 E., Sec. 21; Sec. 28, N1/2NE1/4 and N1/2NW1/4.
NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, W1/2NW1/4, SE1/4NW1/4, SW1/4 and W1/2SE1/4; Sec. 27, E1/2 and N1/2NW1/4; Sec. 34, E1/2.
NV-18-12-146	T. 22 N., R. 63 E., Sec. 32, W1/2NE1/4, SE1/4NE1/4, N1/2NW1/4, E1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-148	T. 23 N., R. 63 E., Sec. 3, Lots 1 and 2, S1/2NE1/4 and NE1/4SE1/4.
NV-18-12-151	T. 23 N., R. 63 E., Sec. 19, Lots 1 thru 3, and SE1/4SW1/4.
NV-18-12-153	T. 23 N., R. 63 E., Sec. 30, Lots 1 thru 4, W1/2NE1/4, E1/2NW1/4, E1/4SW1/4 and W1/2SE1/4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, Lots 1 thru 4, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4, and SE1/4.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14, NE1/4SE1/4 and S1/2SE1/4; Sec. 23, W1/2NE1/4, SW1/4 and W1/2SE1/4; Sec. 26, NW1/4 and SW1/4SW1/4; Sec. 35, W1/2NW1/4, SE1/4NW1/4 and SW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 27, E1/2NE1/4 and SE1/4; Sec. 34, E1/2, E1/2NW1/4 and E1/2SE1/4.
NV-18-12-159	T. 24 N., R. 63 E., Sec. 16, NE1/4, NE1/4NW1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4; Sec. 21, NW1/4 and NW1/4SW1/4.
NV-18-12-160	T. 24 N., R. 63 E., Sec. 17, SE1/4; Sec. 20, Lot 1, E1/2 and SE1/4SW1/4.
NV-18-12-161	T. 24 N., R. 63 E., Sec. 29, Lot 1, NW1/4NE1/4, E1/2NW1/4, SW1/4NW1/4 and NW1/4SW1/4; Sec. 30, Lot 6, SE1/4NE1/4, NE1/4SE1/4 and SE1/4; Sec. 31, Lots 1 and 2, and E1/2NW1/4.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4 and NW1/4SE1/4. Sec. 12, NE1/4NW1/4 and SW1/4SW1/4.
NV-18-12-164	T. 24 N., R. 66 E., Sec. 1, SE1/4SE1/4, NE1/4SE1/4 and S1/2SE1/4; Sec. 3, NW1/4NW1/4; Sec. 4, N1/2NE1/4 and N1/2NW1/4.

NV-18-12-165	T. 24 N., R. 66 E., Sec. 5, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and W1/2SE1/4; Sec. 6, NE1/4, N1/2NW1/4, SW1/4NW1/4 and NE1/4SE1/4; Sec. 8, E1/2, N1/2NW1/4, SE1/4NW1/4 and E1/2SW1/4.
NV-18-12-166	T. 24 N., R. 66 E., Sec. 10, E1/2, Sec. 11; Sec. 12, NE1/4, S1/2NW1/4, SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 13, NW1/4NW1/4; Sec. 14, N1/2, SW1/4 and NW1/4SE1/4; Sec. 15, NE1/4SE1/4 and S1/2SE1/4.
NV-18-12-169	T. 24 N., R. 66 E., Sec. 22, NE1/4; Sec. 23, NW1/4NW1/4.
NV-18-12-174	T. 21 N., R. 67 E., Sec. 5, W1/2NW1/4 and W1/2SW1/4; Sec. 6, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 7, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 8, W1/2NW1/4.
NV-18-12-177	T. 21 N., R. 67 E., Sec. 18, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 19, W1/2NE1/4, E1/2NW1/4, W1/2SW1/4 and NW1/4SE1/4.
NV-18-12-180	T. 21 N., R. 67 E., Sec. 30, S1/2NW1/4 and SW1/4; Sec. 31, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-187	T. 23 N., R. 67 E., Sec. 22, SE1/4NE1/4, SE1/4SW1/4 and SE1/4; Sec. 23, SW1/4.
NV-18-12-188	T. 23 N., R. 67 E., Sec. 26, NW1/4 and W1/2SW1/4; Sec. 27, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 28, SE1/4NE1/4 and SE1/4.
NV-18-12-190	T. 23 N., R. 67 E., Sec. 33, E1/2 and W1/2SW1/4; Sec. 34, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4, SW1/4 and NW1/4SE1/4.
NV-18-12-197	T. 21 N., R. 68 E., Sec. 21, SE1/4SW1/4 and SE1/4; Sec. 22, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-198	T. 21 N., R. 68 E., Sec. 25, SW1/4 and SW1/4SE1/4; Sec. 26, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 27; Sec. 28, NE1/4, E1/2NW1/4, NE1/4SW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-200	T. 21 N., R. 68 E., Sec. 34, NE1/4, NE1/4NW1/4 and E1/2SE1/4; Secs. 35 and 36.
NV-18-12-206	T. 12N., R. 57 E., Sec. 10, NE1/4NE1/4; Sec. 11, N1/2NE1/4, N1/2NW1/4, SE1/4NW1/4 and SW1/4NE1/4;

	Sec. 14, NE1/4SE1/4 and S1/2SE1/4.
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**Stipulation – Greater Sage Grouse (GRSG) in
Priority Habitat Management Area (PHMA)
(#NV-L-16-A-NSO)**

Stipulation: No Surface Occupancy (NSO) –Priority Habitat Management Areas (PHMA) outside of Sagebrush Focal Areas (SFA) – Manage oil and gas resources in Nevada as NSO, with two exceptions.

Objective [Purpose]: To protect GRSG in PHMA.

Exception: The Authorized Officer may grant an exception to an oil and gas lease NSO stipulation only where the proposed action is as one of the following:

- (i) Would not have direct, indirect, or cumulative effects on GRSG or its habitat
- (ii) Is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel and would provide a clear net conservation gain to GRSG and its habitat.

Exceptions based on conservation gain (ii) may only be considered in (a) PHMA of mixed ownership where federal minerals underlie less than fifty percent of the total surface or (b) areas of the public lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid federal oil and gas lease existing as of the date of this ARMPA. Exceptions based on conservation gain must also include such measures as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits would endure for the duration of the proposed action's impacts.

Any exceptions to this lease stipulation may be approved by the Authorized Officer only with the concurrence of the State Director. The Authorized Officer may not grant an exception unless the applicable state wildlife agency, the USFWS, and the BLM unanimously find that the proposed action satisfies (i) or (ii). Such finding initially would be made by a team of one field biologist or other GRSG expert from each respective agency. In the event the initial finding were not unanimous, the finding may be elevated to the appropriate BLM State Director, USFWS State Ecological Services Director, and state wildlife agency head for final resolution. In the event their finding were not unanimous, the exception would not be granted. Approved exceptions would be made publicly available at least quarterly.

Modification: None

Waiver: None

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-013	T. 22 N., R. 57 E., Sec. 5, Lot 4, W1/2SW1/4 and SE1/4SW1/4; Sec. 6.
NV-18-12-014	T. 22 N., R. 57 E., Sec. 7; Sec. 8, SW1/4NE1/4, W1/2 and W1/2SE1/4; Sec. 17, W1/2NE1/4 and NW1/4; Sec. 18, Lots 1 thru 4, NE1/4, E1/2NW1/4, E1/4SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-019	T. 22 N., R. 57 E., Sec. 25, S1/2SW1/4 and S1/2SE1/4;

	Sec. 26, SE1/4SE1/4.
NV-18-12-020	T. 22 N., R. 57 E., Sec. 34, SE1/4NE1/4, SE1/4SW1/4, N1/2SE1/4.
NV-18-12-021	T. 22 N., R. 57 E., Sec. 35, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 36.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, W1/2SW1/4; Sec. 6, SE1/4SW1/4 and SE1/4; Sec. 7, Lots 1 and 2, N1/2NE1/4 and E1/2NW1/4.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 17, W1/2.
NV-18-12-027	T. 23 N., R. 57 E., Sec. 18, Lots 2 thru 4, NE1/4NE1/4, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Secs. 19, 30 and 31.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, W1/2; Sec. 29, W1/2NW1/4, SE1/4NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-031	T. 23 N., R. 57 E., Sec. 32, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 24, NE1/4NE1/4, S1/2NE1/4 and SE1/4.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, E1/2.
NV-18-12-049	T. 21 N., R. 58 E., Entire Parcel.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, N1/2 and N1/2SE1/4.
NV-18-12-051	T. 21 N., R. 58 E., Sec. 16, N1/2, SW1/4 and NW1/4SE1/4; Sec. 19; Sec. 20, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 1 thru 4, S1/2NW1/4 and NW1/4SW1/4; Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 3.
NV-18-12-058	T. 22 N., R. 58 E., Sec. 30, Lot 4, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-059	T. 22 N., R. 58 E., Sec. 34, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 29, S1/2SW1/4 and SW1/4SE1/4; Sec. 31.
NV-18-12-061	T. 23 N., R. 58 E., Secs. 1 and 2; Sec. 3, SE1/4SE1/4.

NV-18-12-064	T. 23 N., R. 58 E., Sec. 9, S1/2NE1/4, E1/2SW1/4 and SE1/4; Sec. 10.
NV-18-12-065	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-066	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-067	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-068	T. 23 N., R. 58 E., Sec. 29, Lots 1, 8 and 16; Sec. 32, Lots 1, 8, 9 and 16.
NV-18-12-070	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-071	T. 24 N., R. 58 E., Sec. 2, Lots 3 and 4, S1/2NW1/4 and W1/2SW1/4.
NV-18-12-072	T. 24 N., R. 58 E., Secs. 3 and 4; Sec. 5, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, NE1/4SW1/4 and SE1/4.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 8, NE1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2, N1/2SW1/4, SW1/4SW1/4 and N1/2SE1/4; Sec. 10, N1/2NE1/4, SW1/4NE1/4, NW1/4 and NW1/4SW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, SE1/4SW1/4 and W1/4SE1/4; Sec. 25, W1/2NE1/4, NE1/4NW1/4, S1/2NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 35, E1/2, SE1/4NW1/4, NE1/4SW1/4 and S1/2SW1/4; Sec. 36.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, NE1/4SE1/4 and S1/2SE1/4; Sec. 8, E1/2, S1/2NW1/4 and SW1/4; Secs. 9 and 10.
NV-18-12-084	T. 24 N., R. 58 E., Sec. 11, SW1/4NE1/4, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 12, W1/2SW1/4 and SE1/4SW1/4; Sec. 13, W1/2NE1/4, W1/2 and SE1/4; Sec. 14.
NV-18-12-085	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-086	T. 25 N., R. 58 E., Sec. 17; Sec. 18, Lots 2 thru 4, E1/2, E1/2NW1/4 and E1/2SW1/4; Secs. 19 and 20.
NV-18-12-087	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-088	T. 25 N., R. 58 E., Sec. 25, N1/2NE1/4, NW1/4, and NW1/4SW1/4;

	Sec. 26; Sec. 35, W1/2NE1/4 and W1/2.
NV-18-12-089	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-090	T. 25 N., R. 58 E., Secs. 29 and 30; Sec. 31, NE1/4, NE1/4NW1/4 and E1/2SE1/4; Sec. 32.
NV-18-12-094	T. 16 N., R. 59 E., Sec. 36, NE1/4NE1/4, S1/2NE1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-095	T. 17 N., R. 59 E., Entire Parcel.
NV-18-12-096	T. 17 N., R. 59 E., Secs. 13, 24, and 25; Sec. 36, N1/2NE1/4, SW1/4NE1/4, NW1/4 and N1/2SW1/4.
NV-18-12-098	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-099	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-100	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-102	T. 58 N., R. 59 E., Sec. 19, Lots 1 thru 4.
NV-18-12-105	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-106	T. 15 N., R. 60 E., Sec. 10, N1/2, N1/2SW1/4, SW1/4SW1/4 and SE1/4; Sec. 15, NE1/4, E1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-107	T. 15 N., R. 60 E., Secs. 11 and 12; Sec. 13, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4; Sec. 14, N1/2, E1/2SW1/4 and SE1/4.
NV-18-12-108	T. 15 N., R. 60 E., Sec. 16, E1/2; Sec. 17; Sec. 20, E1/2 and N1/2NW1/4; Sec. 21, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-109	T. 15 N., R. 60 E., Sec. 28, W1/2NW1/4, SE1/4NW1/4 and SW1/4; Sec. 29, E1/2NE1/4 and NE1/4SE1/4.
NV-18-12-110	T. 15 N., R. 60 E., Sec. 23, N1/2NE1/4 and NW1/4; Sec. 24, E1/2NE1/4 and NW1/4NW1/4; Sec. 25, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-112	T. 15 N., R. 60 E., Sec. 36, E1/2.
NV-18-12-121	T. 16 N., R. 60 E., Sec. 25, SW1/4NW1/4, SW1/4 and W1/2SE1/4; Sec. 26, S1/2NE1/4, NW1/4NW1/4, S1/2NW1/4 and S1/2; Sec. 27, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4.

NV-18-12-122	T. 16 N., R. 60 E., Sec. 29, S1/2NW1/4, SW1/4 and W1/2SE1/4; Sec. 30, Lot 8, SE1/4NE1/4, E1/2SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Secs. 31 and 32; Sec. 33, SW1/4NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, E1/2, E1/2NW1/4 and S1/2; Sec. 35; Sec. 36, W1/2NE1/4, W1/2 and W1/2SE1/4.
NV-18-12-126	T. 22 N., R. 62 E., Sec. 2, Lots 3 and 4, S1/2NW1/4, SW1/4 and SW1/4SE1/4; Sec. 11, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 14, NW1/4.
NV-18-12-127	T. 22 N., R. 62 E., Entire Parcel.
NV-18-12-128	T. 23 N., R. 62 E., Sec. 1, Lot 1, SE1/4NE1/4 and E1/2SE1/4; Sec. 3, SW1/4SE1/4.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 10, W1/2NE1/4, SE1/4NE1/4 and SE1/4; Sec. 12, E1/2NE1/4 and E1/2SE1/4; Sec. 13, Lot 2, N1/2NE1/4, SE1/4NE1/4 and E1/2SE1/4.
NV-18-12-130	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-131	T. 23 N., R. 62 E., Sec. 23, W1/2NW1/4 and W1/2SW1/4; Sec. 35, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-132	T. 23 N., R. 62 E., Sec. 24, NE1/4NE1/4.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 1; Sec. 2, Lots 1 and 2, S1/2NE1/4 and SE1/4; Sec. 11, NE1/4; Sec. 12, N1/2, E1/2SW1/4 and SE1/4.
NV-18-12-136	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-137	T. 22 N., R. 63 E., Sec. 6, E1/2NE1/4 and NE1/4SE1/4; Sec. 8, N1/2, NE1/4SW1/4 and SE1/4; Sec. 9.
NV-18-12-139	T. 22 N., R. 63 E., Sec. 10, N1/2, NW1/2SW1/4 and SW1/4SW1/4; Sec. 16, W1/2NE1/4, SE1/4NE1/4, N1/2NW1/4, NE1/4NW1/4 and E1/2SE1/4; Sec. 15, S1/2NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NE1/4, E1/2NW1/4, NE1/4SW1/4, S1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 14, Lots 1 thru 15, E1/2NE1/4, S1/2SW1/4, and SW1/4SE1/4; Sec. 24, Lots 1 thru 6, NW1/4NE1/4, NW1/4 and NE1/4SW1/4.

NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, N1/2, NE1/4SW1/4 and SE1/4; Sec. 27, N1/2NE1/4, SE1/4NE1/4 and E1/2SE1/4; Sec. 34, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-144	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-145	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-146	T. 22 N., R. 63 E., Sec. 31, SE1/4NE1/4, SE1/4SW1/4 and SE1/4; Sec. 32, W1/2NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-147	T. 23 N., R. 63 E., Sec. 11, W1/2NE1/4.
NV-18-12-148	T. 23 N., R. 63 E., Sec. 3, Lots 2 thru 4, S1/2NE1/4, S1/2NW1/4 and S1/2; Secs. 4 thru 6.
NV-18-12-149	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-150	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-151	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-153	T. 23 N., R. 63 E., Secs. 28 and 29; Sec. 30, E1/2 and NE1/4NW1/4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, NE1/4, NE1/4SE1/4 and S1/2SE1/4; Secs. 32 and 33.
NV-18-12-155	T. 23 N., R. 63 E., Sec. 35, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 36, SW1/4NE1/4, W1/2, W1/2SE1/4 and SE1/4SE1/4.
NV-18-12-156	T. 24 N., R. 63 E., Sec. 1, Lots 3 and 4, and S1/2NW1/4; Sec. 2, Lots 1 and 4, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 10, S1/2NE1/4, SE1/4NW1/4 and S1/2; Sec. 11.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14, N1/2, N1/2SW1/4 and SE1/4; Sec. 23, W1/2NE1/4, N1/2SW1/4 and SW1/4SW1/4; Sec. 26, NW1/4NW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 15, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 22, E1/2 and S1/2SE1/4; Sec. 27, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 34, NW1/4NE1/4, W1/2 and SW1/4SE1/4.
NV-18-12-159	T. 24 N., R. 63 E., Sec. 16, NE1/4NE1/4, S1/2NE1/4 and SE1/4; Sec. 21, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 28; Sec. 33, W1/2 and SE1/4.

NV-18-12-160	T. 24 N., R. 63 E., Sec. 20, NE1/4SE1/4 and S1/2SE1/4.
NV-18-12-161	T. 24 N., R. 63 E., Sec. 29, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 30, NE1/4SE1/4 and S1/2SE1/4; Sec. 31, N1/2NE1/4, SE1/4NE1/4 and E1/2NW1/4; Sec. 32, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1, Lots 3 and 4, S1/2NW1/4 and W1/2SW1/4; Sec. 25, E1/2, NE1/4SW1/4 and S1/2SW1/4.
NV-18-12-163	T. 24 N., R. 65 E., Sec. 35, SE1/4NE1/4 and E1/2SE1/4; Sec. 36.
NV-18-12-164	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-165	T. 24 N., R. 66 E., Sec. 5, N1/2, N1/2SW1/4 and SE1/4; Sec. 8, E1/2 and SE1/4SW1/4.
NV-18-12-166	T. 24 N., R. 66 E., Sec. 9; Sec. 10, N1/2NE1/4, SW1/4NE1/4, W1/2, W1/2SE1/4 and SE1/4SE1/4; Sec. 11, N1/2NE1/4, SE1/4NE1/4, N1/2NW1/4, SW1/4SW1/4 and E1/2SE1/4; Sec. 12, W1/2NE1/4, NW1/4 and NW1/4SW1/4.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 14, N1/2NE1/4, SW1/4NE1/4, NW1/4 and N1/2SW1/4; Sec. 15, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 16.
NV-18-12-168	T. 24 N., R. 66 E., Sec. 17, E1/2, E1/2NW1/4 and SW1/4; Secs. 20, 29 and 32.
NV-18-12-169	T. 24 N., R. 66 E., Sec. 21; Sec. 22, W1/2NE1/4, SE1/4NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-170	T. 24 N., R. 66 E., Sec. 26, W1/2NW1/4, SE1/4NW1/4 and SW1/4; Secs. 27 and 28.
NV-18-12-171	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-172	T. 24 N., R. 66 E., Secs. 33 and 34; Sec. 35, W1/2.
NV-18-12-174	T. 21 N., R. 67 E., Sec. 6, W1/2NW1/4 and SW1/4; Sec. 7, W1/2.
NV-18-12-177	T. 21 N., R. 67 E., Sec. 18, W1/2; Sec. 19, W1/2.
NV-18-12-180	T. 21 N., R. 67 E., Sec. 30, NW1/4 and NW1/4SW1/4.

Stipulation – Greater Sage Grouse (GRSG)
Lek Sites, Noise
(#NV-L-16-F-CSU)

Stipulation - Controlled Surface Use (CSU): Authorizations/permits would limit noise from discretionary activities (during construction, operation, or maintenance) to not exceed 10 decibels above ambient sound levels at 0.25 miles from active and pending leks from 2 hours before to 2 hours after sunrise and sunset during the breeding season from March 1 through May 15.

Objective [Purpose]: To protect GRSG lek sites.

Exception: None

Modification: None

Waiver: None

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-013	T. 22 N., R. 57 E., Sec. 4, Lot 4, SW1/4NW1/4 and W1/2SW1/4; Secs. 5 and 6.
NV-18-12-014	T. 22 N., R. 57 E., Entire Parcel.
NV-18-12-015	T. 22 N., R. 57 E., Sec. 9, W1/2NW1/4 and W1/2SW1/4; Sec. 16, W1/2NW1/4.
NV-18-12-016	T. 22 N., R. 57 E., Sec. 19; Sec. 30, Lots 1 and 2, NW1/4NE1/4 and NE1/4NW1/4.
NV-18-12-017	T. 22 N., R. 57 E., Sec. 20, W1/2NE1/4, NW1/4 and W1/2SW1/4.
NV-18-12-021	T. 22 N., R. 57 E., Sec. 35, SE1/4SE1/4; Sec. 36, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, SW1/4SW1/4; Secs. 6 and 7.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 8, W1/2NW1/4; Sec. 17, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-027	T. 23 N., R. 57 E., Secs. 18 and 19; Sec. 30, Lots 1 thru 4, N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4; Sec. 31.
NV-18-12-028	T. 23 N., R. 57 E.,

	Sec. 20, NW1/4NW1/4; Sec. 29, SW1/4SW1/4.
NV-18-12-031	T. 23 N., R. 57 E., Sec. 32, SW1/4NE1/4, W1/2 and SE1/4.
NV-18-12-032	T. 24 N., R. 57 E., Sec. 1, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 2, Lots 1 thru 3, S1/2NE1/4 and NE1/4SE1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 31, Lots 1 thru 4, W1/2NW1/4, W1/2SW1/4, E1/2SE1/4 and SE1/4SE1/4.
NV-18-12-042	T. 25 N., R. 57 E., Sec. 13, W1/2SW1/4 and SE1/4SW1/4; Sec. 14, W1/2NW1/4 and S1/2.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 15, E1/2SE1/4; Sec. 22, E1/2; Secs. 23 and 24.
NV-18-12-044	T. 25 N., R. 57 E., Secs. 25 and 26; Sec. 27, E1/2.
NV-18-12-046	T. 25 N., R. 57 E., Sec. 34, E1/2NE1/4; Secs. 35 and 36.
NV-18-12-049	T. 21 N., R. 58 E., Entire Parcel.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 22, W1/2NE1/4, W1/2 and NW1/4SE1/4; Sec. 27, W1/2; Sec. 28.
NV-18-12-051	T. 21 N., R. 58 E., Entire Parcel.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 2 thru 4, and S1/2NW1/4; Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4 and N1/2SE1/4; Sec. 3.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 31, Lots 3 and 4, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-061	T. 23 N., R. 58 E., Secs. 1 and 2; Sec. 3, Lots 1 thru 3, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 4, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-062	T. 23 N., R. 58 E., Sec. 7, Lot 20.
NV-18-12-063	T. 23 N., R. 58 E., Sec. 8, Lot 1, and lots 6 thru 16; Sec. 17; Sec. 18, Lot 5, lots 11 thru 14, and lots 19 and 20.
NV-18-12-064	T. 23 N., R. 58 E., Entire Parcel.

NV-18-12-065	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-066	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-067	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-068	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-069	T. 23 N., R. 58 E., Sec. 30, Lots 5 thru 7, lots 10 thru 15, and lots 19 and 20; Sec. 31, Lots 5 and 6, and lots 11 thru 13.
NV-18-12-070	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-071	T. 24 N., R. 58 E., Sec. 1, Lot 3; Sec. 2, Lots 3 and 4, S1/2NE1/4, S1/4NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-072	T. 24 N., R. 58 E., Entire Parcel.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 6; Sec. 7, N1/2NE1/4 and NE1/4NW1/4; Sec. 8, N1/2NE1/4 and NW1/4NW1/4.
NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2NE1/4 and N1/2NW1/4; Sec. 10, N1/2NE1/4 and N1/2NW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, SE1/4SE1/4; Sec. 25, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4. Sec. 26, SE1/4SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 34, SE1/4SE1/4; Sec. 35, E1/2 and S1/2SW1/4; Sec. 36.
NV-18-12-082	T. 25 N., R. 58 E., Sec. 5, S1/2SW1/4 and SW1/4SE1/4; Sec. 6, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-083	T. 25 N., R. 58 E., Secs. 7 thru 9; Sec. 10, W1/2NE1/4, SE1/4NE1/4, W1/2 and SE1/4.
NV-18-12-084	T. 25 N., R. 58 E., Sec. 11, S1/2NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4; Sec. 12, SW1/4SW1/4; Sec. 13, W1/2, W1/2SE1/4 and SE1/4SE1/4; Sec. 14.
NV-18-12-085	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-086	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-087	T. 25 N., R. 58 E., Entire Parcel.

NV-18-12-088	T. 25 N., R. 58 E., Secs. 25, 26 and 35; Sec. 36, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-089	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-090	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-091	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-092	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-093	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-094	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-095	T. 17 N., R. 59 E., Entire Parcel.
NV-18-12-096	T. 17 N., R. 59 E., Sec. 13; Sec. 24, NE1/4, N1/2NW1/4, SE1/4NW1/4 and N1/2SE1/4; Sec. 25, S1/2SW1/4 Sec. 36.
NV-18-12-098	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-099	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-100	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-105	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-106	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-107	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-108	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-109	T. 15 N., R. 60 E., Secs. 19, 28 and 29; Sec. 30, NE1/4, N1/2NW1/4, SE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-110	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-111	T. 15 N., R. 60 E., Sec. 27; Sec. 33, N1/2; Sec. 34, N1/2NE1/4 and NW1/4.
NV-18-12-112	T. 15 N., R. 60 E., Sec. 35, N1/2NE1/4 and N1/2NW1/4; Sec. 36, NW1/4NE1/4 and N1/2NW1/4.
NV-18-12-114	T. 16 N., R. 60 E., Sec. 5, NW1/4SW1/4;

	Sec. 6, Lots 2 thru 10, S1/2NE1/4, S1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-119	T. 16 N., R. 60 E., Sec. 19, Lots 1 thru 8, NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-122	T. 16 N., R. 60 E., Sec. 29, SW1/4SW1/4; Sec. 30, Lots 1 thru 8, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Sec. 31; Sec. 32, S1/2NE1/4, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 33, S1/2NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 35; Sec. 36, Lots 3 and 4, SW1/4NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-125	T. 22 N., R. 62 E., Secs. 1 and 12; Sec. 13, NE1/4, N1/2NW1/4 and NE1/4SE1/4.
NV-18-12-126	T. 22 N., R. 62 E., Secs. 2 and 11; Sec. 14, E1/2NE1/4, NW1/4 and N1/2SW1/4.
NV-18-12-127	T. 22 N., R. 62 E., Secs. 3 and 10; Sec. 15, N1/2, N1/2SW1/4 and N1/2SE1/4.
NV-18-12-128	T. 23 N., R. 62 E., Secs. 1 and 2.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 11, Lots 1 thru 4, N1/2NE1/4, SW1/4NE1/4, NW1/4, E1/2SW1/4 and NW1/4SE1/4; Secs. 12 and 13.
NV-18-12-130	T. 23 N., R. 62, Sec. 15, SW1/4 and W1/2SE1/4; Secs. 22, 27 and 34.
NV-18-12-131	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-132	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 35, SE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 1, Lots 2 thru 4, SW1/4NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4; Sec. 2, Lots 1 and 2, S1/2NE1/4 and SE1/4; Sec. 11, NE1/4; Sec. 12, W1/2NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-136	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-137	T. 22 N., R. 63 E., Entire Parcel.

NV-18-12-138	T. 22 N., R. 63 E., Secs. 7 and 18; Sec. 19, NE1/4 and NE1/4NW1/4.
NV-18-12-139	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NW1/4 and NW1/4SW1/4; Sec. 14, Lots 1 thru 15, E1/2NE1/4, S1/2SW1/4 and SW1/4SE1/4.
NV-18-12-141	T. 22 N., R. 63 E., Sec. 17; Sec. 20, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-142	T. 22 N., R. 63 E., Sec. 21; Sec. 33, S1/2NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, N1/2, SW1/4, N1/2SE1/4 and NW1/4SE1/4; Sec. 34.
NV-18-12-144	T. 22 N., R. 63 E., Sec. 23, NW1/4NE1/4, NW1/4 and NW1/4SW1/4; Sec. 26, S1/2SW1/4 and S1/2SE1/4; Sec. 35.
NV-18-12-145	T. 22 N., R. 63 E., Sec. 25, S1/2SE1/4; Sec. 36, NE1/4 and E1/2SE1/4.
NV-18-12-148	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-149	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-150	T. 23 N., R. 63 E., Secs. 15 and 16; Sec. 21, N1/2, SW1/4 and S1/2SE1/4; Sec. 22, N1/2NW1/4 and S1/2SW1/4.
NV-18-12-153	T. 23 N., R. 63 E., Secs. 28 and 29; Sec. 30, Lots 2 thru 4, NE1/4NE1/4, S1/2NE1/4, E1/2SW1/4 and SE1/4.
NV-18-12-154	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-155	T. 23 N., R. 63 E., Sec. 35, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 36, W1/2NW1/4 and SW1/4.
NV-18-12-156	T. 24 N., R. 63 E., Entire Parcel.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14; Sec. 23, W1/2NE1/4, SW1/4 and W1/2SE1/4; Sec. 26, N1/2NW1/4; Sec. 35, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 15; Sec. 22, W1/2 and S1/2SE1/4;

	Sec. 27, N1/2NE1/4, W1/2NW1/4, SE1/4NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4; Sec. 34.
NV-18-12-159	T. 24 N., R. 63 E., Entire Parcel.
NV-18-12-160	T. 24 N., R. 63 E., Sec. 17, S1/2NE1/4, E1/2NW1/4 and SE1/4; Sec. 20, Lot 1, NE1/4NE1/4, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-161	T. 24 N., R. 63 E., Entire Parcel.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1, Lots 1 and 2, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Sec. 12, E1/2, E1/2NW1/4, NE1/4SW1/4 and SW1/4SW1/4; Sec. 13, N1/2NE1/4 and SE1/4NE1/4; Sec. 24, SE1/4SE1/4; Sec. 25, E1/2, SE1/4NW1/4, NE1/4SW1/4 and S1/2SW1/4.
NV-18-12-163	T. 24 N., R. 65 E., Entire Parcel.
NV-18-12-164	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-165	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-166	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 13, N1/2, SW1/4 and NW1/4SE1/4; Secs. 14 thru 16.
NV-18-12-168	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-169	T. 24 N., R. 66 E., Secs. 21 thru 23; Sec. 24, W1/2NW1/4.
NV-18-12-170	T. 24 N., R. 66 E., Sec. 26, N1/2NE1/4, SW1/4NE1/4, W1/2 and W1/2SE1/4; Secs. 27 and 28.
NV-18-12-171	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-172	T. 24 N., R. 66 E., Secs. 33 and 34; Sec. 35, N1/2NW1/4, SW1/4NW1/4 and NW1/4SW1/4.
NV-18-12-188	T. 23 N., R. 67 E., Sec. 27, W1/2SW1/4 and SE1/4SW1/4; Sec. 28, S1/2NW1/4 and S1/2.
NV-18-12-190	T. 23 N., R. 67 E., Sec. 33; Sec. 34, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4 and S1/2; Sec. 35, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-197	T. 21 N., R. 68 E., Sec. 23, S1/2SE1/4; Sec. 24, NE1/4SW1/4, S1/2SW1/4 and SE1/4.

NV-18-12-198	T. 21 N., R. 68 E., Entire Parcel.
NV-18-12-199	T. 21 N., R. 68 E., Sec. 29, S1/2NE1/4 and S1/2; Sec. 30, SE1/4SE1/4; Sec. 31, E1/2 and E1/2SW1/4; Sec. 32.
NV-18-12-200	T. 21 N., R. 68 E., Entire Parcel.

**Stipulation – Greater Sage Grouse (GRSG)
Lek Sites, Buffer Distances
(#NV-L-16-G-CSU)**

Stipulation – Controlled Surface Use (CSU): The BLM will apply lek buffer distances specified as the lower end of the interpreted range in the report unless justifiable departures are determined to be appropriate (see below). The lower end of the interpreted range of the lek buffer distances is as follows:

- Linear features (roads) within 3.1 miles of leks
- Infrastructure related to energy development within 3.1 miles of leks
- Tall structures (e.g., communication or transmission towers and transmission lines) within 3 miles of leks
- Low structures (e.g., fences and rangeland structures) within 1.2 miles of leks.
- Surface disturbance (continuing human activities that alter or remove the natural vegetation) within 3.1 miles of leks.
- Noise and related disruptive activities, including those that do not result in habitat loss (e.g., motorized recreational events) at least 0.25 mile from leks.

Objective [Purpose]: To protect GRSG leks.

Exception: Justifiable departures to decrease or increase from these distances, based on local data, best available science, landscape features, and other existing protections (e.g., land use allocations and state regulations) may be appropriate for determining activity impacts. The USGS report recognized “that because of variation in populations, habitats, development patterns, social context, and other factors, for a particular disturbance type, there is no single distance that is an appropriate buffer for all populations and habitats across the sage-grouse range.” The USGS report also states that “various protection measures have been developed and implemented...[which have] the ability (alone or in concert with others) to protect important habitats, sustain populations, and support multiple-use demands for public lands.” All variation in lek buffer distances will require appropriate analysis and disclosure as part of activity authorization.

Modification: None

Waiver: None

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-013	T. 22 N., R. 57 E., Sec. 4, Lot 4, SW1/4NW1/4 and W1/2SW1/4; Secs. 5 and 6.
NV-18-12-014	T. 22 N., R. 57 E., Entire Parcel.
NV-18-12-015	T. 22 N., R. 57 E., Sec. 9, W1/2NW1/4 and W1/2SW1/4; Sec. 16, W1/2NW1/4.
NV-18-12-016	T. 22 N., R. 57 E., Sec. 19; Sec. 30, Lots 1 and 2, NW1/4NE1/4 and NE1/4NW1/4.

NV-18-12-017	T. 22 N., R. 57 E., Sec. 20, W1/2NE1/4, NW1/4 and W1/2SW1/4.
NV-18-12-021	T. 22 N., R. 57 E., Sec. 35, SE1/4SE1/4; Sec. 36, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, SW1/4SW1/4; Secs. 6 and 7.
NV-18-12-024	T. 23 N., R. 57 E., Sec. 8, W1/2NW1/4; Sec. 17, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-027	T. 23 N., R. 57 E., Secs. 18 and 19; Sec. 30, Lots 1 thru 4, N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4; Sec. 31.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, NW1/4NW1/4; Sec. 29, SW1/4SW1/4.
NV-18-12-031	T. 23 N., R. 57 E., Sec. 32, SW1/4NE1/4, W1/2 and SE1/4.
NV-18-12-032	T. 24 N., R. 57 E., Sec. 1, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4 and SE1/4; Sec. 2, Lots 1 thru 3, S1/2NE1/4 and NE1/4SE1/4.
NV-18-12-039	T. 24 N., R. 57 E., Sec. 31, Lots 1 thru 4, W1/2NW1/4, W1/2SW1/4, E1/2SE1/4 and SE1/4SE1/4.
NV-18-12-042	T. 25 N., R. 57 E., Sec. 13, W1/2SW1/4 and SE1/4SW1/4; Sec. 14, W1/2NW1/4 and S1/2.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 15, E1/2SE1/4; Sec. 22, E1/2; Secs. 23 and 24.
NV-18-12-044	T. 25 N., R. 57 E., Secs. 25 and 26; Sec. 27, E1/2.
NV-18-12-046	T. 25 N., R. 57 E., Sec. 34, E1/2NE1/4; Secs. 35 and 36.
NV-18-12-049	T. 21 N., R. 58 E., Entire Parcel.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 22, W1/2NE1/4, W1/2 and NW1/4SE1/4; Sec. 27, W1/2; Sec. 28.
NV-18-12-051	T. 21 N., R. 58 E., Entire Parcel.

NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 2 thru 4, and S1/2NW1/4; Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4 and N1/2SE1/4; Sec. 3.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 31, Lots 3 and 4, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-061	T. 23 N., R. 58 E., Secs. 1 and 2; Sec. 3, Lots 1 thru 3, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 4, SE1/4NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-062	T. 23 N., R. 58 E., Sec. 7, Lot 20.
NV-18-12-063	T. 23 N., R. 58 E., Sec. 8, Lot 1, and lots 6 thru 16; Sec. 17; Sec. 18, Lot 5, lots 11 thru 14, and lots 19 and 20.
NV-18-12-064	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-065	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-066	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-067	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-068	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-069	T. 23 N., R. 58 E., Sec. 30, Lots 5 thru 7, lots 10 thru 15, and lots 19 and 20; Sec. 31, Lots 5 and 6, and lots 11 thru 13.
NV-18-12-070	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-071	T. 24 N., R. 58 E., Sec. 1, Lot 3; Sec. 2, Lots 3 and 4, S1/2NE1/4, S1/4NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-072	T. 24 N., R. 58 E., Entire Parcel.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 6; Sec. 7, N1/2NE1/4 and NE1/4NW1/4; Sec. 8, N1/2NE1/4 and NW1/4NW1/4.
NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2NE1/4 and N1/2NW1/4; Sec. 10, N1/2NE1/4 and N1/2NW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, SE1/4SE1/4; Sec. 25, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4. Sec. 26, SE1/4SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 34, SE1/4SE1/4; Sec. 35, E1/2 and S1/2SW1/4;

	Sec. 36.
NV-18-12-082	T. 25 N., R. 58 E., Sec. 5, S1/2SW1/4 and SW1/4SE1/4; Sec. 6, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-083	T. 25 N., R. 58 E., Secs. 7 thru 9; Sec. 10, W1/2NE1/4, SE1/4NE1/4, W1/2 and SE1/4.
NV-18-12-084	T. 25 N., R. 58 E., Sec. 11, S1/2NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4; Sec. 12, SW1/4SW1/4; Sec. 13, W1/2, W1/2SE1/4 and SE1/4SE1/4; Sec. 14.
NV-18-12-085	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-086	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-087	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-088	T. 25 N., R. 58 E., Secs. 25, 26 and 35; Sec. 36, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-089	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-090	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-091	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-092	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-093	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-094	T. 16 N., R. 59 E., Entire Parcel.
NV-18-12-095	T. 17 N., R. 59 E., Entire Parcel.
NV-18-12-096	T. 17 N., R. 59 E., Sec. 13; Sec. 24, NE1/4, N1/2NW1/4, SE1/4NW1/4 and N1/2SE1/4; Sec. 25, S1/2SW1/4 Sec. 36.
NV-18-12-098	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-099	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-100	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-105	T. 15 N., R. 60 E., Entire Parcel.

NV-18-12-106	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-107	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-108	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-109	T. 15 N., R. 60 E., Secs. 19, 28 and 29; Sec. 30, NE1/4, N1/2NW1/4, SE1/4NW1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-110	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-111	T. 15 N., R. 60 E., Sec. 27; Sec. 33, N1/2; Sec. 34, N1/2NE1/4 and NW1/4.
NV-18-12-112	T. 15 N., R. 60 E., Sec. 35, N1/2NE1/4 and N1/2NW1/4; Sec. 36, NW1/4NE1/4 and N1/2NW1/4.
NV-18-12-114	T. 16 N., R. 60 E., Sec. 5, NW1/4SW1/4; Sec. 6, Lots 2 thru 10, S1/2NE1/4, S1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-119	T. 16 N., R. 60 E., Sec. 19, Lots 1 thru 8, NE1/4, E1/2NW1/4, E1/2SW1/4 and W1/2SE1/4.
NV-18-12-122	T. 16 N., R. 60 E., Sec. 29, SW1/4SW1/4; Sec. 30, Lots 1 thru 8, W1/2NE1/4, SE1/4NE1/4, E1/2NW1/4, E1/2SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Sec. 31; Sec. 32, S1/2NE1/4, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 33, S1/2NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 35; Sec. 36, Lots 3 and 4, SW1/4NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-125	T. 22 N., R. 62 E., Secs. 1 and 12; Sec. 13, NE1/4, N1/2NW1/4 and NE1/4SE1/4.
NV-18-12-126	T. 22 N., R. 62 E., Secs. 2 and 11; Sec. 14, E1/2NE1/4, NW1/4 and N1/2SW1/4.
NV-18-12-127	T. 22 N., R. 62 E., Secs. 3 and 10; Sec. 15, N1/2, N1/2SW1/4 and N1/2SE1/4.
NV-18-12-128	T. 23 N., R. 62 E., Secs. 1 and 2.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 11, Lots 1 thru 4, N1/2NE1/4, SW1/4NE1/4, NW1/4, E1/2SW1/4 and NW1/4SE1/4; Secs. 12 and 13.

NV-18-12-130	T. 23 N., R. 62, Sec. 15, SW1/4 and W1/2SE1/4; Secs. 22, 27 and 34.
NV-18-12-131	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-132	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-134	T. 24 N., R. 62 E., Sec. 35, SE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 1, Lots 2 thru 4, SW1/4NE1/4, S1/2NW1/4, SW1/4 and W1/2SE1/4; Sec. 2, Lots 1 and 2, S1/2NE1/4 and SE1/4; Sec. 11, NE1/4; Sec. 12, W1/2NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-136	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-137	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-138	T. 22 N., R. 63 E., Secs. 7 and 18; Sec. 19, NE1/4 and NE1/4NW1/4.
NV-18-12-139	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NW1/4 and NW1/4SW1/4; Sec. 14, Lots 1 thru 15, E1/2NE1/4, S1/2SW1/4 and SW1/4SE1/4.
NV-18-12-141	T. 22 N., R. 63 E., Sec. 17; Sec. 20, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-142	T. 22 N., R. 63 E., Sec. 21; Sec. 33, S1/2NE1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, N1/2, SW1/4, N1/2SE1/4 and NW1/4SE1/4; Sec. 34.
NV-18-12-144	T. 22 N., R. 63 E., Sec. 23, NW1/4NE1/4, NW1/4 and NW1/4SW1/4; Sec. 26, S1/2SW1/4 and S1/2SE1/4; Sec. 35.
NV-18-12-145	T. 22 N., R. 63 E., Sec. 25, S1/2SE1/4; Sec. 36, NE1/4 and E1/2SE1/4.
NV-18-12-148	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-149	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-150	T. 23 N., R. 63 E., Secs. 15 and 16; Sec. 21, N1/2, SW1/4 and S1/2SE1/4; Sec. 22, N1/2NW1/4 and S1/2SW1/4.

NV-18-12-153	T. 23 N., R. 63 E., Secs. 28 and 29; Sec. 30, Lots 2 thru 4, NE1/4NE1/4, S1/2NE1/4, E1/2SW1/4 and SE1/4.
NV-18-12-154	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-155	T. 23 N., R. 63 E., Sec. 35, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 36, W1/2NW1/4 and SW1/4.
NV-18-12-156	T. 24 N., R. 63 E., Entire Parcel.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14; Sec. 23, W1/2NE1/4, SW1/4 and W1/2SE1/4; Sec. 26, N1/2NW1/4; Sec. 35, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 15; Sec. 22, W1/2 and S1/2SE1/4; Sec. 27, N1/2NE1/4, W1/2NW1/4, SE1/4NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4; Sec. 34.
NV-18-12-159	T. 24 N., R. 63 E., Entire Parcel.
NV-18-12-160	T. 24 N., R. 63 E., Sec. 17, S1/2NE1/4, E1/2NW1/4 and SE1/4; Sec. 20, Lot 1, NE1/4NE1/4, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-161	T. 24 N., R. 63 E., Entire Parcel.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1, Lots 1 and 2, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Sec. 12, E1/2, E1/2NW1/4, NE1/4SW1/4 and SW1/4SW1/4; Sec. 13, N1/2NE1/4 and SE1/4NE1/4; Sec. 24, SE1/4SE1/4; Sec. 25, E1/2, SE1/4NW1/4, NE1/4SW1/4 and S1/2SW1/4.
NV-18-12-163	T. 24 N., R. 65 E., Entire Parcel.
NV-18-12-164	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-165	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-166	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 13, N1/2, SW1/4 and NW1/4SE1/4; Secs. 14 thru 16.
NV-18-12-168	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-169	T. 24 N., R. 66 E., Secs. 21 thru 23; Sec. 24, W1/2NW1/4.

NV-18-12-170	T. 24 N., R. 66 E., Sec. 26, N1/2NE1/4, SW1/4NE1/4, W1/2 and W1/2SE1/4; Secs. 27 and 28.
NV-18-12-171	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-172	T. 24 N., R. 66 E., Secs. 33 and 34; Sec. 35, N1/2NW1/4, SW1/4NW1/4 and NW1/4SW1/4.
NV-18-12-188	T. 23 N., R. 67 E., Sec. 27, W1/2SW1/4 and SE1/4SW1/4; Sec. 28, S1/2NW1/4 and S1/2.
NV-18-12-190	T. 23 N., R. 67 E., Sec. 33; Sec. 34, N1/2NE1/4, N1/2NW1/4, SW1/4NW1/4 and S1/2; Sec. 35, SW1/4NW1/4, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-197	T. 21 N., R. 68 E., Sec. 23, S1/2SE1/4; Sec. 24, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-198	T. 21 N., R. 68 E., Entire Parcel.
NV-18-12-199	T. 21 N., R. 68 E., Sec. 29, S1/2NE1/4 and S1/2; Sec. 30, SE1/4SE1/4; Sec. 31, E1/2 and E1/2SW1/4; Sec. 32.
NV-18-12-200	T. 21 N., R. 68 E., Entire Parcel.

**Stipulation – Greater Sage Grouse (GRSG)
Priority Habitat Management Area (PHMA) Disturbance Cap
(#NV-L-16-H-CSU)**

Stipulation – Controlled Surface Use (CSU): New development/activity would not exceed the 3% disturbance cap protocol at either the biologically significant unit (BSU) or project scale in PHMA, unless a technical team (described under the exception) determines that new or site-specific information indicates the project could be modified to result in a net conservation gain at the BSU level.

Objective [Purpose]: To create a net conservation gain at the project and BSU level.

Exception: Nevada lands only – Any exceptions to the disturbance cap may be approved by the Authorized Officer only with the concurrence of the State Director. The Authorized Officer may not grant an exception unless the NDOW, the USFWS, and the BLM unanimously find that the proposed action satisfies the conditions stated in the stipulation. Initially, the technical team would make such finding; the team consists of a field biologist or other GRSG expert from each respective agency. In the event the initial finding were not unanimous, the finding may be elevated to the BLM State Director, USFWS State Ecological Services Director, and NDOW Director for final resolution. In the event their recommendation were not unanimous to grant the exception, the exception would not be granted.

Modification: None

Waiver: None

Parcel #	Legal Land Description
	Mount Diablo Meridian, Nevada
NV-18-12-013	T. 22 N., R. 57 E., Sec. 5, Lot 4, W1/2SW1/4 and SE1/4SW1/4; Sec. 6.
NV-18-12-014	T. 22 N., R. 57 E., Sec. 7; Sec. 8, SW1/4NE1/4, W1/2 and W1/2SE1/4; Sec. 17, W1/2NE1/4 and NW1/4; Sec. 18, Lots 1 thru 4, NE1/4, E1/2NW1/4, E1/4SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-019	T. 22 N., R. 57 E., Sec. 25, S1/2SW1/4 and S1/2SE1/4; Sec. 26, SE1/4SE1/4.
NV-18-12-020	T. 22 N., R. 57 E., Sec. 34, SE1/4NE1/4, SE1/4SW1/4, N1/2SE1/4.
NV-18-12-021	T. 22 N., R. 57 E., Sec. 35, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 36.
NV-18-12-023	T. 23 N., R. 57 E., Sec. 5, W1/2SW1/4; Sec. 6, SE1/4SW1/4 and SE1/4; Sec. 7, Lots 1 and 2, N1/2NE1/4 and E1/2NW1/4.
NV-18-12-024	T. 23 N., R. 57 E.,

	Sec. 17, W1/2.
NV-18-12-027	T. 23 N., R. 57 E., Sec. 18, Lots 2 thru 4, NE1/4NE1/4, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and SE1/4; Secs. 19, 30 and 31.
NV-18-12-028	T. 23 N., R. 57 E., Sec. 20, W1/2; Sec. 29, W1/2NW1/4, SE1/4NW1/4, SW1/4 and W1/2SE1/4.
NV-18-12-031	T. 23 N., R. 57 E., Sec. 32, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4.
NV-18-12-043	T. 25 N., R. 57 E., Sec. 24, NE1/4NE1/4, S1/2NE1/4 and SE1/4.
NV-18-12-044	T. 25 N., R. 57 E., Sec. 25, E1/2.
NV-18-12-049	T. 21 N., R. 58 E., Entire Parcel.
NV-18-12-050	T. 21 N., R. 58 E., Sec. 15, N1/2 and N1/2SE1/4.
NV-18-12-051	T. 21 N., R. 58 E., Sec. 16, N1/2, SW1/4 and NW1/4SE1/4; Sec. 19; Sec. 20, N1/2, SW1/4 and W1/2SE1/4.
NV-18-12-053	T. 22 N., R. 58 E., Sec. 1, Lots 1 thru 4, S1/2NW1/4 and NW1/4SW1/4; Sec. 2, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, SW1/4, N1/2SE1/4 and SW1/4SE1/4.; Sec. 3.
NV-18-12-058	T. 22 N., R. 58 E., Sec. 30, Lot 4, SE1/4SW1/4 and S1/2SE1/4.
NV-18-12-059	T. 22 N., R. 58 E., Sec. 34, W1/2SW1/4 and SE1/4SW1/4.
NV-18-12-060	T. 22 N., R. 58 E., Sec. 29, S1/2SW1/4 and SW1/4SE1/4; Sec. 31.
NV-18-12-061	T. 23 N., R. 58 E., Secs. 1 and 2; Sec. 3, SE1/4SE1/4.
NV-18-12-064	T. 23 N., R. 58 E., Sec. 9, S1/2NE1/4, E1/2SW1/4 and SE1/4; Sec. 10.
NV-18-12-065	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-066	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-067	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-068	T. 23 N., R. 58 E., Sec. 29, Lots 1, 8 and 16; Sec. 32, Lots 1, 8, 9 and 16.

NV-18-12-070	T. 23 N., R. 58 E., Entire Parcel.
NV-18-12-071	T. 24 N., R. 58 E., Sec. 2, Lots 3 and 4, S1/2NW1/4 and W1/2SW1/4.
NV-18-12-072	T. 24 N., R. 58 E., Secs. 3 and 4; Sec. 5, Lots 1 thru 4, S1/2NE1/4, S1/2NW1/4, NE1/4SW1/4 and SE1/4.
NV-18-12-073	T. 24 N., R. 58 E., Sec. 8, NE1/4, N1/2SE1/4 and SE1/4SE1/4.
NV-18-12-074	T. 24 N., R. 58 E., Sec. 9, N1/2, N1/2SW1/4, SW1/4SW1/4 and N1/2SE1/4; Sec. 10, N1/2NE1/4, SW1/4NE1/4, NW1/4 and NW1/4SW1/4.
NV-18-12-078	T. 24 N., R. 58 E., Sec. 24, SE1/4SW1/4 and W1/4SE1/4; Sec. 25, W1/2NE1/4, NE1/4NW1/4, S1/2NW1/4, SW1/4, W1/2SE1/4 and SE1/4SE1/4.
NV-18-12-079	T. 24 N., R. 58 E., Sec. 35, E1/2, SE1/4NW1/4, NE1/4SW1/4 and S1/2SW1/4; Sec. 36.
NV-18-12-083	T. 25 N., R. 58 E., Sec. 7, NE1/4SE1/4 and S1/2SE1/4; Sec. 8, E1/2, S1/2NW1/4 and SW1/4; Secs. 9 and 10.
NV-18-12-084	T. 24 N., R. 58 E., Sec. 11, SW1/4NE1/4, W1/2NW1/4, SE1/4NW1/4 and S1/2; Sec. 12, W1/2SW1/4 and SE1/4SW1/4; Sec. 13, W1/2NE1/4, W1/2 and SE1/4; Sec. 14.
NV-18-12-085	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-086	T. 25 N., R. 58 E., Sec. 17; Sec. 18, Lots 2 thru 4, E1/2, E1/2NW1/4 and E1/2SW1/4; Secs. 19 and 20.
NV-18-12-087	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-088	T. 25 N., R. 58 E., Sec. 25, N1/2NE1/4, NW1/4, and NW1/4SW1/4; Sec. 26; Sec. 35, W1/2NE1/4 and W1/2.
NV-18-12-089	T. 25 N., R. 58 E., Entire Parcel.
NV-18-12-090	T. 25 N., R. 58 E., Secs. 29 and 30; Sec. 31, NE1/4, NE1/4NW1/4 and E1/2SE1/4; Sec. 32.
NV-18-12-094	T. 16 N., R. 59 E., Sec. 36, NE1/4NE1/4, S1/2NE1/4, NE1/4SW1/4, S1/2SW1/4 and SE1/4.
NV-18-12-095	T. 17 N., R. 59 E., Entire Parcel.

NV-18-12-096	T. 17 N., R. 59 E., Secs. 13, 24, and 25; Sec. 36, N1/2NE1/4, SW1/4NE1/4, NW1/4 and N1/2SW1/4.
NV-18-12-098	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-099	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-100	T. 23 N., R. 59 E., Entire Parcel.
NV-18-12-102	T. 58 N., R. 59 E., Sec. 19, Lots 1 thru 4.
NV-18-12-105	T. 15 N., R. 60 E., Entire Parcel.
NV-18-12-106	T. 15 N., R. 60 E., Sec. 10, N1/2, N1/2SW1/4, SW1/4SW1/4 and SE1/4; Sec. 15, NE1/4, E1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4.
NV-18-12-107	T. 15 N., R. 60 E., Secs. 11 and 12; Sec. 13, W1/2NE1/4, NW1/4, N1/2SW1/4 and SW1/4SW1/4; Sec. 14, N1/2, E1/2SW1/4 and SE1/4.
NV-18-12-108	T. 15 N., R. 60 E., Sec. 16, E1/2; Sec. 17; Sec. 20, E1/2 and N1/2NW1/4; Sec. 21, W1/2NW1/4 and W1/2SW1/4.
NV-18-12-109	T. 15 N., R. 60 E., Sec. 28, W1/2NW1/4, SE1/4NW1/4 and SW1/4; Sec. 29, E1/2NE1/4 and NE1/4SE1/4.
NV-18-12-110	T. 15 N., R. 60 E., Sec. 23, N1/2NE1/4 and NW1/4; Sec. 24, E1/2NE1/4 and NW1/4NW1/4; Sec. 25, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-112	T. 15 N., R. 60 E., Sec. 36, E1/2.
NV-18-12-121	T. 16 N., R. 60 E., Sec. 25, SW1/4NW1/4, SW1/4 and W1/2SE1/4; Sec. 26, S1/2NE1/4, NW1/4NW1/4, S1/2NW1/4 and S1/2; Sec. 27, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4.
NV-18-12-122	T. 16 N., R. 60 E., Sec. 29, S1/2NW1/4, SW1/4 and W1/2SE1/4; Sec. 30, Lot 8, SE1/4NE1/4, E1/2SW1/4 and SE1/4.
NV-18-12-123	T. 16 N., R. 60 E., Secs. 31 and 32; Sec. 33, SW1/4NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-124	T. 16 N., R. 60 E., Sec. 34, E1/2, E1/2NW1/4 and S1/2; Sec. 35; Sec. 36, W1/2NE1/4, W1/2 and W1/2SE1/4.
NV-18-12-126	T. 22 N., R. 62 E., Sec. 2, Lots 3 and 4, S1/2NW1/4, SW1/4 and SW1/4SE1/4;

	Sec. 11, W1/2NE1/4, W1/2 and W1/2SE1/4; Sec. 14, NW1/4.
NV-18-12-127	T. 22 N., R. 62 E., Entire Parcel.
NV-18-12-128	T. 23 N., R. 62 E., Sec. 1, Lot 1, SE1/4NE1/4 and E1/2SE1/4; Sec. 3, SW1/4SE1/4.
NV-18-12-129	T. 23 N., R. 62 E., Sec. 10, W1/2NE1/4, SE1/4NE1/4 and SE1/4; Sec. 12, E1/2NE1/4 and E1/2SE1/4; Sec. 13, Lot 2, N1/2NE1/4, SE1/4NE1/4 and E1/2SE1/4.
NV-18-12-130	T. 23 N., R. 62 E., Entire Parcel.
NV-18-12-131	T. 23 N., R. 62 E., Sec. 23, W1/2NW1/4 and W1/2SW1/4; Sec. 35, SW1/4NW1/4 and W1/2SW1/4.
NV-18-12-132	T. 23 N., R. 62 E., Sec. 24, NE1/4NE1/4.
NV-18-12-135	T. 22 N., R. 63 E., Sec. 1; Sec. 2, Lots 1 and 2, S1/2NE1/4 and SE1/4; Sec. 11, NE1/4; Sec. 12, N1/2, E1/2SW1/4 and SE1/4.
NV-18-12-136	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-137	T. 22 N., R. 63 E., Sec. 6, E1/2NE1/4 and NE1/4SE1/4; Sec. 8, N1/2, NE1/4SW1/4 and SE1/4; Sec. 9.
NV-18-12-139	T. 22 N., R. 63 E., Sec. 10, N1/2, NW1/2SW1/4 and SW1/4SW1/4; Sec. 16, W1/2NE1/4, SE1/4NE1/4, N1/2NW1/4, NE1/4NW1/4 and E1/2SE1/4; Sec. 15, S1/2NE1/4, S1/2NW1/4 and S1/2.
NV-18-12-140	T. 22 N., R. 63 E., Sec. 13, NE1/4, E1/2NW1/4, NE1/4SW1/4, S1/2SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 14, Lots 1 thru 15, E1/2NE1/4, S1/2SW1/4, and SW1/4SE1/4; Sec. 24, Lots 1 thru 6, NW1/4NE1/4, NW1/4 and NE1/4SW1/4.
NV-18-12-143	T. 22 N., R. 63 E., Sec. 22, N1/2, NE1/4SW1/4 and SE1/4; Sec. 27, N1/2NE1/4, SE1/4NE1/4 and E1/2SE1/4; Sec. 34, E1/2NE1/4 and E1/2SE1/4.
NV-18-12-144	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-145	T. 22 N., R. 63 E., Entire Parcel.
NV-18-12-146	T. 22 N., R. 63 E., Sec. 31, SE1/4NE1/4, SE1/4SW1/4 and SE1/4; Sec. 32, W1/2NE1/4, W1/2 and NW1/4SE1/4.

NV-18-12-147	T. 23 N., R. 63 E., Sec. 11, W1/2NE1/4.
NV-18-12-148	T. 23 N., R. 63 E., Sec. 3, Lots 2 thru 4, S1/2NE1/4, S1/2NW1/4 and S1/2; Secs. 4 thru 6.
NV-18-12-149	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-150	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-151	T. 23 N., R. 63 E., Entire Parcel.
NV-18-12-153	T. 23 N., R. 63 E., Secs. 28 and 29; Sec. 30, E1/2 and NE1/4NW1/4.
NV-18-12-154	T. 23 N., R. 63 E., Sec. 31, NE1/4, NE1/4SE1/4 and S1/2SE1/4; Secs. 32 and 33.
NV-18-12-155	T. 23 N., R. 63 E., Sec. 35, E1/2, E1/2NW1/4 and E1/2SW1/4; Sec. 36, SW1/4NE1/4, W1/2, W1/2SE1/4 and SE1/4SE1/4.
NV-18-12-156	T. 24 N., R. 63 E., Sec. 1, Lots 3 and 4, and S1/2NW1/4; Sec. 2, Lots 1 and 4, S1/2NE1/4, S1/2NW1/4 and S1/2; Sec. 10, S1/2NE1/4, SE1/4NW1/4 and S1/2; Sec. 11.
NV-18-12-157	T. 24 N., R. 63 E., Sec. 14, N1/2, N1/2SW1/4 and SE1/4; Sec. 23, W1/2NE1/4, N1/2SW1/4 and SW1/4SW1/4; Sec. 26, NW1/4NW1/4.
NV-18-12-158	T. 24 N., R. 63 E., Sec. 15, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 22, E1/2 and S1/2SE1/4; Sec. 27, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 34, NW1/4NE1/4, W1/2 and SW1/4SE1/4.
NV-18-12-159	T. 24 N., R. 63 E., Sec. 16, NE1/4NE1/4, S1/2NE1/4 and SE1/4; Sec. 21, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 28; Sec. 33, W1/2 and SE1/4.
NV-18-12-160	T. 24 N., R. 63 E., Sec. 20, NE1/4SE1/4 and S1/2SE1/4.
NV-18-12-161	T. 24 N., R. 63 E., Sec. 29, E1/2, NE1/4NW1/4, S1/2NW1/4 and SW1/4; Sec. 30, NE1/4SE1/4 and S1/2SE1/4; Sec. 31, N1/2NE1/4, SE1/4NE1/4 and E1/2NW1/4; Sec. 32, N1/2, N1/2SW1/4, SE1/4SW1/4 and SE1/4.
NV-18-12-162	T. 24 N., R. 65 E., Sec. 1, Lots 3 and 4, S1/2NW1/4 and W1/2SW1/4; Sec. 25, E1/2, NE1/4SW1/4 and S1/2SW1/4.

NV-18-12-163	T. 24 N., R. 65 E., Sec. 35, SE1/4NE1/4 and E1/2SE1/4; Sec. 36.
NV-18-12-164	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-165	T. 24 N., R. 66 E., Sec. 5, N1/2, N1/2SW1/4 and SE1/4; Sec. 8, E1/2 and SE1/4SW1/4.
NV-18-12-166	T. 24 N., R. 66 E., Sec. 9; Sec. 10, N1/2NE1/4, SW1/4NE1/4, W1/2, W1/2SE1/4 and SE1/4SE1/4; Sec. 11, N1/2NE1/4, SE1/4NE1/4, N1/2NW1/4, SW1/4SW1/4 and E1/2SE1/4; Sec. 12, W1/2NE1/4, NW1/4 and NW1/4SW1/4.
NV-18-12-167	T. 24 N., R. 66 E., Sec. 14, N1/2NE1/4, SW1/4NE1/4, NW1/4 and N1/2SW1/4; Sec. 15, N1/2, SW1/4, N1/2SE1/4 and SW1/4SE1/4; Sec. 16.
NV-18-12-168	T. 24 N., R. 66 E., Sec. 17, E1/2, E1/2NW1/4 and SW1/4; Secs. 20, 29 and 32.
NV-18-12-169	T. 24 N., R. 66 E., Sec. 21; Sec. 22, W1/2NE1/4, SE1/4NE1/4, W1/2 and NW1/4SE1/4.
NV-18-12-170	T. 24 N., R. 66 E., Sec. 26, W1/2NW1/4, SE1/4NW1/4 and SW1/4; Secs. 27 and 28.
NV-18-12-171	T. 24 N., R. 66 E., Entire Parcel.
NV-18-12-172	T. 24 N., R. 66 E., Secs. 33 and 34; Sec. 35, W1/2.
NV-18-12-174	T. 21 N., R. 67 E., Sec. 6, W1/2NW1/4 and SW1/4; Sec. 7, W1/2.
NV-18-12-177	T. 21 N., R. 67 E., Sec. 18, W1/2; Sec. 19, W1/2.
NV-18-12-180	T. 21 N., R. 67 E., Sec. 30, NW1/4 and NW1/4SW1/4.

Appendix E-Ely District Best Management Practices for Oil & Gas

Air Resources

1. Use dust abatement techniques on unpaved, un-vegetated surfaces to minimize airborne dust.
2. Post and enforce speed limits (e.g., 25 miles per hour) to reduce airborne fugitive dust.
3. Cover construction materials and stockpiled soils if they are a source of fugitive dust.
4. Use dust abatement techniques before and during surface clearing, excavation, or blasting activities.

Water Resources

1. Avoid the application of fire retardant or foam within 300 feet of a stream channel or waterway, when possible, except for the protection of life and property. Aerial application and use of retardants and foams would be consistent with national policy guidelines established by the National Office of Fire and Aviation, as amended.
2. Fire engines that have surfactant foam mixes in tanks must be fitted with an anti-siphon (back flow protection valve) if filled directly from a stream channel.
3. Construct a containment barrier around all pumps and fuel containers utilized within 100 feet (30.5 meters) of a stream channel. The containment barrier would be of sufficient size to contain all fuel being stored or used on site.
4. Prior to use on lands administered by the Ely Field Office, all fire suppression equipment from outside the planning area utilized to extract water from lakes, streams, ponds, or spring sources (e.g., helicopter buckets, draft hoses, and screens) will be thoroughly rinsed to remove mud and debris and then disinfected to prevent the spread of invasive aquatic species. Rinsing equipment with disinfectant solution will not occur within 100 feet of natural water sources (i.e., lakes, streams, or springs). Ely suppression equipment utilized to extract water from water sources known to be contaminated with invasive aquatic species, as identified by the U.S. Fish and Wildlife Service and Nevada Department of Wildlife, also will be disinfected prior to use elsewhere on lands administered by the Ely Field Office.
5. Do not dump surfactant foam mixes from fire engines within 600 feet of a stream channel.
6. Do not conduct fire retardant mixing operations within 600 feet of a stream channel.
7. Remove all modifications made to impound or divert stream flow by mechanical or other means to facilitate extraction of water from a stream for fire suppression efforts when suppression efforts are completed.
8. When drafting or dipping water during fire operations, continuously monitor water levels at the site that water is being removed from. Do not allow water extraction to exceed the ability of the recharge inflow to maintain the water levels that exist at the time initial attack efforts began. If the water level drops below this predetermined level, all water removal would cease immediately until water levels are recharged.
9. When possible, do not cross or terminate fire control lines at the stream channel. Terminate control lines at the edge of the riparian zone at a location determined appropriate to meet fire suppression objectives based on fire behavior, vegetation/fuel types, and fire fighter safety.
10. Construct access roads and fords that cross stream channels to BLM road standards.
11. Do not construct new roads or mechanical fire control lines or improve existing roads within 300 feet of a stream channel unless authorized by the BLM Field Manager or Authorized Officer.
12. Limit stream crossings on travel routes and trails to the minimal number necessary to minimize sedimentation and compaction. The BLM Authorized Officer will determine if any impacts need to be rehabilitated by the permittee.
13. Conduct mixing of herbicides and rinsing of herbicide containers and spray equipment only in areas that are a safe distance from environmentally sensitive areas and points of entry to bodies of water (storm drains, irrigation ditches, streams, lakes, or wells).
14. A water well may be accepted by the BLM Ely Field Office upon completion of operations. The

BLM authorized officer will make the determination whether to accept the well based upon the submission of the well completion forms and relevant hydrogeologic data reports. The well must be installed by drillers licensed by the state of Nevada according to specifications in Nevada Revised Statutes Title 48, Chapter 534.

Soil Resources

1. Require the use of specialized low-surface impact equipment (e.g., balloon tired vehicles) or helicopters, as determined by the BLM Authorized Officer, for activities in off-road areas where it is deemed necessary to protect fragile soils and other resource values.
2. During periods of adverse soil moisture conditions caused by climatic factors such as thawing, heavy rains, snow, flooding, or drought, suspend activities on existing roads that could create excessive surface rutting. When adverse conditions exist, the operator would contact the BLM Authorized Officer for an evaluation and decision based on soil types, soil moisture, slope, vegetation, and cover.
3. When preparing the site for reclamation, include contour furrowing, terracing, reduction of steep cut and fill slopes, and the installation of water bars, as determined appropriate for site- specific conditions.
4. Upon completion or temporary suspension of mining operations, backfill all holes and trenches and re-contour the pit to the natural slope, if possible, with pit walls greater than 3 feet in height knocked down and sloped at 3 horizontal to 1 vertical or to the original topography, whichever is less.
5. Restoration requirements include reshaping, re-contouring, and/or resurfacing with topsoil, installation of water bars, and seeding on the contour. Removal of structures such as culverts, concrete pads, cattle guards, and signs would usually be required. Fertilization and/or fencing of the disturbance may be required. Additional erosion control measures (e.g., fiber matting and barriers) to discourage road travel may be required.

Vegetation Resources

1. Where seeding is required, use appropriate seed mixture and seeding techniques approved by the BLM Authorized Officer.
2. The BLM Authorized Officer will specify required special handling and recovery techniques for Joshua trees, yucca, and some cactus in the southern part of the planning area on a site- specific basis.
3. Keep removal and disturbance of vegetation to a minimum through construction site management (e.g., using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.).
4. Generally, conduct reclamation with native seeds that are representative of the indigenous species present in the adjacent habitat. Document rationale for potential seeding with selected nonnative species. Possible exceptions would include use of nonnative species for a temporary cover crop to out-complete weeds. In all cases, ensure seed mixes are approved by the BLM Authorized Officer prior to planting.
5. Certify that all interim and final seed mixes, hay, straw, and hay/straw products are free of plant species listed on the Nevada noxious weed list.
6. An area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion has been stabilized, and an acceptable vegetative cover has been established. Use the Nevada Guidelines for Successful Revegetation prepared by the Nevada Division of Environmental Protection, the BLM, and the U.S. Department of Agriculture Forest Service (or most current revision or replacement of this document) to determine if revegetation is successful.
7. Reclamation bond release criteria would include the following:
8. The perennial plant cover of the reclaimed area would equal or exceed perennial cover of selected comparison areas (normally adjacent habitat). If the adjacent habitat is severely disturbed, an ecological site description may be used as a cover standard. Cover is normally crown cover as estimated by the point intercept method. Selected cover can be determined using a method as described in Sampling Vegetation Attributes, Interagency Technical Reference, 1996, BLM/RS/ST-96/002+1730. The reclamation plan for the area project would identify the site-specific release criteria and associated statistical methods in the

reclamation plan or permit.

9. Utility companies will manage vegetation in their rights-of-way for safe and reliable operation while maintaining vegetation and wildlife habitat.

10. Re-spread weed-free vegetation removed from the right-of-way to provide protection, nutrient recycling, and seed source.

Fish and Wildlife

1. Install wildlife escape ramps in all watering troughs, including temporary water haul facilities, and open storage tanks. Pipe the overflow away from the last water trough on an open system to provide water at ground level.

2. As appropriate, mark certain trees on BLM-administered lands for protection as wildlife trees.

3. Consider seasonal distribution of large wildlife species when determining methods used to accomplish weed and insect control objectives.

4. Protect active raptor nests in undisturbed areas within 0.25 mile of areas proposed for vegetation conversion using species-specific protection measures. Inventory areas containing suitable nesting habitat for active raptor nests prior to the initiation of any project.

5. When used to pump water from any pond or stream, screen the intake end of the draft hose to prevent fish from being ingested. Screen opening size would be a maximum of 3/16 inch (4.7 millimeters).

6. Special recreation use permittees will take action to ensure that race participants and spectators do not harass wildlife.

Special Status Species

1. Avoid line-of-sight views between the power poles along powerlines and sage grouse leks, whenever feasible.

2. Use current science, guidelines, and methodologies (Avian Power Line Interaction Committee 1994, 1996, 2005) for all new and existing powerlines to minimize raptor and other bird electrocution and collision potential.

3. When managing weeds in areas of special status species, carefully consider the impacts of the treatment on such species. Wherever possible, hand spraying of herbicides is preferred over other methods.

4. Do not conduct noxious and invasive weed control within 0.5 mile of nesting and brood rearing areas for special status species during the nesting and brood rearing season.

5. To the greatest extent possible, survey all mine adits and shafts slated for closure for bat presence and use prior to being closed. Minimize impacts to bat roosts and bat habitat through the use of current science, guidelines, and methodologies when closing and abandoning mine adits.

6. Develop grazing systems to minimize conflicts with special status species habitat.

7. For streams currently occupied by any special status species, do not allow extraction of water from ponds or pools if stream inflow is minimal (i.e., during drought situations) and extraction of water would lower the existing pond or pool level.

8. When new spring developments are constructed on BLM lands and BLM has the authority to design the project, the source and surrounding riparian area will be fenced, the spring will be developed in a manner that leaves surface water at the source and maintains the associated riparian area, water will be provided outside the enclosure in a manner that provides drinking water for large ungulates, wild horses, and/or livestock so they are less likely to break into the enclosure.

9. Salt and mineral supplements:

- Base placement of salt and mineral supplements on site-specific assessment.
- Normally place salt and mineral supplements at least 0.5 mile away from riparian areas, sensitive sites, populations of special status plant species, cultural resource sites.
- Place salt at least 0.5 mile from any water source including troughs.

- Place salt and mineral supplements at least 1 mile from sage grouse leks.

Water hauling:

- Place water haul sites at least 0.5 mile away from riparian areas, cultural sites, and special status species locations.
- Limit water hauling to existing roads when possible.

Wild Horses

1. To protect wild horses and wildlife flag all new fences every 16 feet with white flagging that is at least 1 inch wide and has at least 12 inches hanging free from the top wire of the fence.
2. If a project involves heavy or sustained traffic, require road signs for safety and protection of wild horses and wildlife.

Cultural Resources

1. Ensure that all activities associated with the undertaking, within 100 meters of the discovery, are halted and the discovery is appropriately protected, until the BLM authorized officer issues a Notice to Proceed. A Notice to Proceed may be issued by the BLM under any of the following conditions:
 - Evaluation of potentially eligible resource(s) results in a determination that the resource(s) are not eligible;
 - The fieldwork phase of the treatment option has been completed; and
 - The BLM has accepted a summary description of the fieldwork performed and a reporting schedule for that work.
2. The operator will inform all persons associated with the project that knowingly disturbing cultural resources (historic or archaeological) or collecting artifacts is illegal.
3. The BLM may approve cross-country operations of seismic trucks and support vehicles on bare frozen ground or over sufficient snow depth (vehicle traffic does not reveal the ground) so as to prevent surface disturbance.
4. Perform viewshed reclamation when the setting of a site contributes to the significance of the property.

Paleontological Resources

When paleontological resources of potential scientific interest are encountered (including all vertebrate fossils and deposits of petrified wood), leave them intact and immediately bring them to the attention of the BLM Authorized Officer.

Visual Resources

1. On industrial facilities authorized by the Ely Field Office, utilize anti-glare light fixtures to limit light pollution.
2. During the implementation of vegetation treatments, create irregular margins around treatment areas to better maintain the existing scenic character of the landscape.
3. When feasible, bury utility lines on public land when in the viewshed of residential or community development.

Travel Management and Off-highway Vehicle Use

1. Design access roads requiring construction with cut and fill to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material would be deposited, resource concerns, and visual contrast. Avoid construction of access roads on steep hillsides and near watercourses where alternate routes provide adequate access.
2. Where adverse impacts or safety considerations warrant, limit or prohibit public access when

authorizing specific routes to areas or sites under permit or lease.

Recreation

1. Do not allow surface or underground disturbance to occur within 100 yards (horizontally or vertically) of known cave resources.
2. Where appropriate, do not allow ground disturbing activities within 100 yards of cave entrances, drainage areas, subsurface passages, and developed recreation sites. Do not dispose of waste material or chemicals in sinkholes or gates by cave entrances. If during construction activities any sinkholes or cave openings are discovered, cease construction activities and notify the BLM authorized officer.

Livestock Grazing

1. Water troughs
 - Place troughs connected with spring developments outside of riparian and wetland habitats to reduce livestock trampling damage to wet areas.
 - Control trough overflow at springs with float valves or deliver the overflow back into the native channel.
2. Based on allotment situations and circumstances associated with livestock grazing and multiple use management, implement any or all of the following appropriate management practices on winterfat dominated ecological sites.
 - Develop grazing systems to control or rest grazing use on winterfat sites after March 1 or when the critical growing season begins. Allow spring grazing use during the critical growing period if a grazing rotation system that provides rest from grazing during the critical growing period at least every other year for all areas is in place. Utilization during the critical growth period should not exceed 35 percent under any circumstances.
 - Place salt and supplements at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - Locate sheep bedding grounds and camps at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - Locate water haul sites at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - Construct livestock reservoirs away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - If water wells are approved to be drilled in winterfat dominated sites, strive to pipe the water at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.

Mineral Extraction

1. Applications for permit to drill would follow the best management practices as outlined in the BLM oil and gas Gold Book (http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices/gold_book.html), as well as on-shore regulations, individual surface use plans, and conditions of approval that may be part of the Record of Decision for EISs or Decision Records for environmental assessments/Findings of No Significant Impacts, Documentation of NEPA Adequacy, and Categorical Exclusions prepared for site-specific projects.
2. Do not permit blasting if it would be detrimental to the significant characteristics of archeological or historical values, recreation areas, known caves, water wells, or springs.
3. Notify the BLM authorized officer within 5 days of completion of reclamation work so that timely compliance inspections can be completed.

Watershed Management

1. Manage activities, uses, and authorizations on burned areas to best meet resource management objectives established for the area in specific stabilization, restoration, or activity plans. The BLM authorized officer may open areas to livestock grazing based upon those considerations.

Fire Management

1. Notify valid existing land users (such as mine claimants, holders of rights-of-way, and livestock permittees) prior to implementation of prescribed fires that may affect their investments.
2. Remove vegetation, where appropriate, to protect facilities (e.g., range improvements, communication sites, and recreation sites).
3. Within the area of operation, every effort will be made to prevent, control, or suppress any fire. Fire-fighting equipment may be required to be on site while operations are in progress, depending on hazards inherent in the type of operation and fire hazard levels. Report uncontrolled fires immediately to the BLM Ely Field Office Manager or Authorized Officer. The BLM Fire Dispatch telephone number is (775) 289-1925 or 1-800-633-6092. After working hours, call 911 or the White Pine County Sheriff's Office at (775) 289-8801, the Lincoln County Sheriff's Office at (775) 962-5151, or the Nye County Sheriff's Office at (775) 482-8101.

Noxious and Invasive Weed Management

1. Control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.
2. When maintaining unpaved roads on BLM-administered lands, avoid the unnecessary disturbance of adjacent native vegetation and the spread of weeds. Grade road shoulders or barrow ditches only when necessary to provide for adequate drainage. Minimize the width of grading operations. The BLM Authorized Officer will meet with equipment operators to ensure that they understand this objective.

Health and Safety

1. Consider nozzle type, nozzle size, boom pressure, and adjuvant use and take appropriate measures for each herbicide application project to reduce the chance of chemical drift.
2. All applications of approved pesticides will be conducted only by certified pesticide applicators or by personnel under the direct supervision of a certified applicator.
3. Prior to commencing any chemical control program, and on a daily basis for the duration of the project, the certified applicator will provide a suitable safety briefing to all personnel working with or in the vicinity of the herbicide application. This briefing will include safe handling, spill prevention, cleanup, and first aid procedures.
4. Store all pesticides in areas where access can be controlled to prevent unauthorized/untrained people from gaining access to the chemicals.
5. Do not apply pesticides within 440 yards (0.25 mile) of residences without prior notification of the resident.
6. Areas treated with pesticides will be adequately posted to notify the public of the activity and of safe reentry dates, if a public notification requirement is specified on the label of the product applied. The public notice signs will be at least 8 1/2" x 11" in size and will contain the date of application and the date of safe re-entry.
7. The recreation permittee will post warning signs at all known mine shafts and other hazardous areas that occur within 100 feet of a race course or pit/spectator area and will verbally inform race participants of all hazards at the pre-race meeting.
8. The recreation permittee will assume liability for and cleanup of any and all releases of hazardous substances or oil (more than one quart) disposed on public land as defined in the National Oil and Hazardous Substances Contingency Plan (Title 40 Code of Federal Regulations Subpart 300). The

permittee will immediately notify the BLM Authorized Officer of any and all releases of hazardous substances or oil (more than one quart) on public land.

9. Properly dispose of all tailings, dumps, and deleterious materials or substances. Take measures to isolate, control, and properly dispose of toxic and hazardous materials.

10. Remove and properly dispose of all trash, garbage, debris, and foreign matter. Maintain the disposal site and leave it in a clean and safe condition. Do not allow burning at the site.

11. Do not drain oil or lubricants onto the ground surface. Immediately clean up any spills under 25 gallons; clean up spills over 25 gallons as soon as possible and report the incident to the BLM Authorized Officer and Nevada Division of Environmental Protection.

12. The operator will work with the BLM Authorized Officer on the containment of drilling fluids and drillhole cuttings. Adequately fence, post, or cover mud and separation pits, and hazardous material storage areas.

13. Locate powder magazines at least 0.25 mile from traveled roads. Attend loaded shot holes and charges at all times. Use explosives according to applicable federal and state regulations.

14. Containerize petroleum products such as gasoline, diesel fuel, helicopter fuel, and lubricants in approved containers. Properly store hazardous materials in separate containers to prevent mixing, drainage, or accidents.

Appendix F-Hydraulic Fracturing White Paper

This discussion on hydraulic fracturing is derived from the Hydraulic Fracturing (BLM 2013) written and developed by the Bureau of Land Management, Wyoming State Office. It has been modified to meet the criteria for the State of Nevada.

I. BACKGROUND

Hydraulic fracturing (HF) is a well stimulation process used to efficiently maximize the extraction of underground resources – groundwater, oil, natural gas, and geothermal energy. The HF process includes the acquisition of water, mixing of chemicals, surface pressure pumps, production zone fracturing, and HF flowback disposal.

In the United States, HF has been used since the 1940's. Early on, the HF process utilized pressures that are of a much smaller magnitude than those used today.

The HF process involves the injection of a fracturing fluid and propping agent into the hydrocarbon bearing formation under sufficient pressure to widen existing fractures and/or create new fractures. This allows the trapped hydrocarbons an avenue to flow to the wellbore. HF has gained interest recently as hydrocarbons trapped in low permeability or “tight” sand and shale formations are now technically and economically recoverable. As a result, oil and gas production has increased significantly in the United States.

Prior to the development of HF in hydrocarbon bearing tight gas and shale formations, domestic production of conventional resources had been declining. In response to this decline, the federal government in the 1970's through 1992, passed tax credits to encourage the development of unconventional resources. It was during this time that the HF process was further advanced to include the high-pressure multi-stage HF operations being conducted today.

Generally, HF can be described as follows:

1. Water, proppant, and chemical additives are pumped at extremely high pressures down the wellbore.
2. The fracturing fluid is pumped through perforated sections of the wellbore and into the surrounding formation, creating fractures in the rock. The proppant holds the fractures open during well production.
3. Company personnel continuously monitor and gauge pressures, fluids and proppants, studying how the proppants reacts when it hits the bottom of the wellbore, slowly increasing the density of proppants to water as HF progresses.
4. This process may be repeated multiple times, in “stages” to reach maximum areas of the formation(s). The wellbore is temporarily plugged between each stage to maintain the highest fluid pressure possible for the drill casing and to get maximum fracturing results in the rock.
5. The plugs are drilled or removed from the wellbore and the well is tested for results.

6. The pressure is reduced and the fracturing fluids are returned up the wellbore for disposal or treatment and re-use, leaving the proppant in place to prop open the fractures and allow the oil/gas to flow.

II. OPERATIONAL ISSUES

Wells that undergo HF may be drilled vertically, horizontally, or directionally and the resultant fractures induced by HF can be vertical, horizontal, or both. Wells in Nevada (NV) may extend to depths greater than 10,000 feet or less than 1,000 feet, and horizontal sections of a well may extend several thousand feet from the production pad on the surface. Prior to initiating HF, a cement bond log and pressure test is required and evaluated to ensure the integrity of the cement and its bond to both the well casing and the rock facies around the annulus within the geologic formation.

The total volume of fracturing fluids is generally 95-99% water. The amount of water needed to fracture a well in NV depends on the geologic basin, the formation, and depth and type of well (vertical, horizontal, directional), and the proposed completion process.

In general, approximately 25,000 to 350,000 gallons may be used to fracture shallow vertical wells in NV, while approximately 800,000 to 10 million gallons may be used to fracture deep horizontal or directionally drilled wells in NV.

Proppant, consisting of synthetic or natural silica sand, may be used in quantities of a few hundred tons for a vertical well to a few thousand tons for a horizontal well.

Drilling muds, drilling fluids, water, proppant, and HF fluids are stored in onsite tanks or lined pits during the drilling and/or completion process. Equipment transport and setup can take several days, and the actual HF and flowback process can occur in a few days up to a few weeks. For oil wells, the flowback fluid from the HF operations is treated in an oil-water separator before it is stored in a lined pit or tank located on the surface. Where gas wells are flowed back using a “green completion process” fluids are run through a multi-phase separator, which are then piped directly to enclosed tanks or to a production unit. Nevada currently does not have any gas production, but this may change, if gas rich formations are discovered.

Gas emissions associated with the HF process, such as methane, carbon dioxide, and volatile organic compounds (VOCs), are captured when the operator utilizes a green completion process. A “green completion process” is where the operator captures gases at the well head immediately after the well is completed. Where a green completion process is not utilized, gas emissions associated with the well may be vented and/or flared until “saleable quality” product is obtained in accordance with federal and state rules and regulations. The total volume of emissions from the equipment used (trucks, engines) will vary based on the pressures needed to fracture the well, and the number of zones to be fractured.

Under either completion process, wastewaters from HF may be disposed in several ways. For example, the flowback fluids may be stored in tanks pending reuse; the resultant waste may be re-injected using a permitted injection well, or the waste may be hauled to a licensed facility for treatment, disposal and/or reuse.

Disposal of the waste stream following establishment of “sale-quality” product, would be handled in accordance with Onshore Order #7 regulations and other state/federal rules and regulations.

Fracturing Fluids

As indicated above, the fluid used in the HF process is approximately 95 to 99 percent water and proppants, and 1-5 percent of special-purpose chemical additives. There is a broad array of chemicals that can be used as additives in a fracture treatment including, but not limited to, hydrochloric acid, anti-bacterial agents, corrosion inhibitors, gelling agents (polymers), surfactants, and scale inhibitors. The 1 to 5 percent of chemical additives translates to a minimum of 15,000 gallons of chemicals for every 1.5 million gallons of water used to fracture a well (Paschke, Dr. Suzanne. USGS, Denver, Colorado. September 2011). Water used in the HF process is generally acquired from surface water or groundwater in the local area. Information on obtaining water and water rights is discussed below.

The Nevada Division of Minerals (NDOM) has regulations that require the reporting of the amount and type of chemicals used in a HF operation in “FracFocus” within 60 days of HF completion for public disclosure. For more information concerning FracFocus and HF, refer to the FracFocus website at www.fracfocus.org and the NDOM website at minerals.state.nv.us.

Re-Fracturing

Re-fracturing of wells (RHF) may be performed after a period of time to restore declining production rates. RHF success can be attributed to enlarging and reorienting existing fractures while restoring conductivity due to proppant degradation and fines plugging. Prior to RHF, the wellbore may be cleaned out. Cleaning out the wellbore may recover over 50% of the initial proppant sand. Once cleaned, the process of RHF is the same as the initial HF. The need for RHF cannot be predicted.

Water Availability and Consumption Estimates

According to the Nevada State Water Plan (March 1999), total statewide water withdrawals for NV are forecasted to increase about 9 percent from 4,041,000 acre-feet (af) in 1995 to 4,391,000 acre-feet in 2020, assuming current levels of conservation. Approximately one-half of these withdrawals are consumptively used. This projected increase in water use is directly attributable to Nevada’s increasing population and related increases in economic endeavors.

The anticipated rise in total statewide water withdrawals primarily reflects expected increases in public supply for municipal and industrial (M&I) water usage to meet the needs of a growing urban population, with expanding commercial and industrial activities. Nevada’s population is projected to reach about 3,047,000 by the year 2020, with about 95 percent of these residents served by public water systems (NDWP, March 1999).

M&I withdrawals currently account for about 13 percent of the water used in NV. About 77 percent of water withdrawals are currently for agricultural use. Annual M&I water use is projected to increase from 525,000 af in 1995 to 1,034,000 af in 2020 (24 percent of total water withdrawals) based upon existing water use patterns and conservation measures. Approximately 6 to 7 percent of statewide water withdrawals occur in the mining industry (NDWP, March 1999).

Interest in obtaining the necessary water supplies for wildlife and environmental needs is increasing. Additionally, the popularity of water-based outdoor recreation continues to grow. It is anticipated that these trends will continue, resulting in increased water supply demands for wildlife, environmental and recreational purposes.

Currently, surface water supplies are virtually fully appropriated. The increase in total statewide demand, particularly M&I water use, is expected to be met via better demand management (conservation), use of alternative sources (reused water, reclaimed water and gray water), purchases, leases or other transfers from existing water users, and by new groundwater appropriations. Much of the state's unappropriated groundwater is located in basins at a distance from urban centers. Thus, increasing attention will be placed on interbasin and intercounty transfers, and implementation of underutilized water management tools such as water marketing and water banking. Water for instream flow purposes, wildlife protection, environmental purposes and recreation will likely be generated by increased conservation and the acquisition of existing water rights (NDWP, March 1999).

Comparison Figures:

- Olympic-sized swimming pool - **660,430 gallons** of water.
- Typical golf course requires **100,000 to 1,000,000 gallons** of water per week in summer to maintain healthy vegetation.
- Average car wash of fresh water uses **9 to 15 gallons** during any given wash cycle.
- Average household in Southern Nevada uses about **222 gallons** of water per day (**81,000 gallons** per year).

Potential Sources of Water for Hydraulic Fracturing

Quality freshwater is required to drill the surface-casing section of the wellbore per Federal regulations; other sections of the wellbore (intermediate and/or production strings) would be drilled with appropriate quality makeup water as necessary. This is done to protect usable water zones from contamination, to prevent mixing of zones containing different water quality/use classifications, and to minimize total freshwater volumes. With detailed geologic well logging during drilling operations, geologists/mud loggers on location identify the bottoms of these usable water zones, which aids in the proper setting of casing depths. Usable water is defined as having less than 10,000 mg/l of Total Dissolved Solids (TDS). Drinking or potable water is defined as having less than 1,000 mg/l of TDS.

Several sources of water are available for drilling and/or HF in NV. Nevada's water rights system is based on the prior appropriation doctrine; therefore, all use of water, with the exception of domestic wells, requires a permit from the State Engineer (NRS 534.180). Like any other water user, companies that drill or hydraulically fracture oil and gas wells must adhere to NV water laws when obtaining and using specific sources of water.

Below is a discussion of the sources of water that could potentially be used for HF. The decision to use any specific source is dependent on BLM authorization at the APD stage and the ability to obtain water rights. From an operators' standpoint, the decision regarding which water source will be used is primarily driven by the economics associated with procuring a specific water source.

Water transported from outside the state. The operator may transport water from outside the state. As long as the transport and use of the water carries no legal obligation to NV, this is an allowable source of water from a water rights perspective.

Irrigation water leased or purchased from a landowner. The landowner may have rights to surface water, delivered by a ditch or canal that is used to irrigate land. The operator may choose to enter into an agreement with the landowner to purchase or lease a portion of that water. This is allowable, however, in nearly every case, the use of an irrigation water right is likely limited to irrigation uses and cannot be used for well drilling and HF operations. To allow its use for drilling and HF, the owner of the water right and the operator must apply to change the water right through a formal process.

Treated water or raw water leased or purchased from a water provider or municipality. The operator may choose to enter into an agreement with a water provider to purchase or lease water from the water provider's system. Municipalities and other water providers may have a surplus of water in their system before it is treated (raw water) or after treatment that can be used for drilling and HF operations. Such an arrangement would be allowed only if the operator's use were compliant with the water provider's water rights.

Water treated at a waste water treatment plant leased or purchased from a water provider. The operator may choose to enter into an agreement with a water provider to purchase or lease water that has been used by the public and then treated as wastewater. Municipalities and other water providers discharge their treated waste water into the streams where it becomes part of the public resource, ready to be appropriated once again in the priority system. But for many municipalities a portion of the water that is discharged has the character of being "reusable." As a result, it is possible that after having been discharged to the stream, it could be diverted by the operator to be used for drilling and HF operations. Such an arrangement would only be appropriate with the approval of the Nevada Division of Water Resources, State Engineer's Office (NDWR) and would be allowed only if the water provider's water rights include uses for drilling and HF operations.

New diversion of surface water flowing in streams and rivers. New diversion of surface waters in most parts of the state are rare because the surface streams are already fully appropriated, meaning that there is no water available for appropriation. Given the variability of surface water flows in the State, this may not be the most reliable water source even if there is water available for appropriation.

Produced Water. The operator may choose to use water produced in conjunction with oil or gas production at an existing oil or gas well. The water that is produced from an oil or gas well is under the administrative purview of the NDEP, Underground Injection Control Program (UIC) and is either non-tributary, in which case, it is administered independent of the prior appropriation doctrine; or is tributary, in which case, the depletions from its withdrawal must be fully augmented if the depletions occur in an over-appropriated basin. The result in either case is that the produced water is available for consumption for other purposes, not just oil and gas operations. The water must not be encumbered by other needs and the operator must obtain a proper well permit from the NDWR before the water can be used for drilling and HF operations.

Reused or Recycled Drilling Water. Water that is used for drilling of one well may be recovered and reused in the construction of subsequent wells. The BLM encourages reuse and recycling of both the water used in well drilling and the water produced in conjunction with oil or gas production. However, as described above, the operator must obtain the right to use the water for this purpose.

On-Location Water Supply Wells. Operators may apply for, and receive, permission from the NDWR to drill and use a new water supply well. These wells are usually drilled on location to provide an on-demand supply. The proper construction, operation and maintenance, backflow prevention and security of these water supply wells are critical considerations at the time they are proposed to minimize impacts to the well and/or the waters in the well, water right holders and water-dependent resources. Plugging these wells is under the jurisdiction of the NDWR and BLM.

Authorization of any future proposed projects would require full compliance with local, state, and federal regulations and laws that relate to surface and groundwater protection and would be subject to routine inspections by the BLM and the State of Nevada Commission on Mineral Resources, Division of Minerals Memorandum of Understanding dated January 9, 2006, prior to approval.

III. Potential Impacts to Usable Water Zones

Impacts to freshwater supplies can originate from point sources, such as chemical spills, chemical storage tanks (aboveground and underground), industrial sites, landfills, household septic tanks, and mining activities. Impacts to usable waters may also occur through a variety of oil and gas operational sources which may include, but are not limited to, pipeline and well casing failure, and well (gas, oil and/or water) drilling and construction of related facilities. Similarly, improper construction and management of open fluids pits and production facilities could degrade ground water quality through leakage and leaching.

Should hydrocarbons or associated chemicals for oil and gas development, including HF, exceeding US Environmental Protection Agency (EPA)/NDEP standards for minimum concentration levels migrate into potable water supply wells, springs, or usable water systems, it could result in these water sources becoming non-potable and killing off aquatic species. Water wells developed for oil and gas drilling could also result in a drawdown in the quantity of water in nearby residential areas depending upon the geology and volumes of water extracted.

Usable groundwater aquifers are most susceptible to pollution where the aquifer is shallow (within 100 feet of the surface depending on surface geology) or perched, are very permeable, or connected directly to a surface water system, such as through floodplains and/or alluvial valleys or where operations occur in geologic zones which are highly fractured and/or lack a sealing formation between the production zone and the usable water zones. If an impact to usable waters were to occur, a greater number of people could be affected in densely populated areas versus sparsely populated areas characteristic of NV. Pollution could also impact usable waters in remote basins where interbasin transfer projects can pump and transport water through pipelines to urban areas, like Las Vegas and Reno. The BLM is also required to analyze potential impacts to aquatic species from groundwater contamination.

Potential impacts on usable groundwater resources from fluid mineral extraction activities could result from the following scenarios:

1. Contamination of aquifers through the introduction of drilling and/or completion fluids through spills or drilling problems, such as lost circulation zones.
2. Communication of the induced hydraulic fractures with existing fractures potentially allows for HF fluid migration into usable water zones/supplies. The potential for this impact is likely dependent on the local hydraulic gradients where those fluids are dissolved in the water column.
3. Cross-contamination of aquifers/formations may result when fluids from a deeper aquifer/formation migrate into a shallower aquifer/formation due to improperly cemented well casings.
4. Localized depletion of perched aquifer or drawdown of unconfined groundwater aquifer. Progressive contamination of deep confined, shallow confined, and unconfined aquifers if the deep confined aquifers are not completely cased off, and geologically isolated, from deeper oil bearing units. An example of this would be salt water intrusion resulting from sustained drawdown associated with the pumping of groundwater.
5. Casing failure (casing ruptures in low pressure formations, casing corrosion)
6. Communication through old abandoned wells nearby
7. Transportation of fluids to and from site (accidents)
8. Wastewater disposal

The impacts above could occur as a result of the following processes:

Improper casing and cementing.

A well casing design that is not set at the proper depths or a cementing program that does not properly isolate necessary formations could allow oil, gas or HF fluids to contaminate other aquifers/formations. In addition, old well casing and casing cement that has corroded over time can fail allowing contaminants to migrate into the well formation.

Natural fractures, faults, and abandoned wells.

If HF of oil and gas wells result in new fractures connecting with established natural fractures, faults, or improperly plugged dry or abandoned wells, a pathway for gas or contaminants to migrate underground may be created posing a risk to water quality. The potential for this impact is currently unknown but it is generally accepted that the potential decreases with increasing distance between the production zone and usable water zones. This potential again is dependent upon the site specific conditions at the well location.

Fracture growth.

A number of studies and publications report that the risk of induced fractures extending out of the target formation into an aquifer allowing hydrocarbons or other fluids to contaminate the aquifer may depend, in part, on the formation thickness separating the targeted fractured formation and the aquifer. According to a 2012 Bipartisan Policy Center report, the fracturing process itself is unlikely to directly affect freshwater aquifers because in Nevada fracturing typically takes place at a depth of 6,000 to 10,000 feet, while drinking water aquifers are typically less than 1,000 feet deep. However, some areas of Nevada, the deep carbonate aquifer can extend to 6,000 feet below ground surface. Recent studies have shown that induced fractures created during HF growing more

than 350 meters vertically is less than 1% (Lacazette and Geiser). If a parcel is sold and development is proposed in usable water zones, those operations would have to comply with federal and/or state water quality standards or receive a Class II designation from the NDEP.

Fracture growth and the potential for upward fluid migration, through volcanic, sedimentary and other geologic formations depend on site-specific factors such as the following:

1. Physical properties, types, thicknesses, and depths of the targeted formation as well as those of the overlying geologic formations.
2. Presence of existing natural fracture systems and their orientation in the target formation and surrounding formations.
3. Amount and distribution of stress (i.e., in-situ stress), and the stress contrasts between the targeted formation and the surrounding formations.

Hydraulic fracture stimulation designs include the volume of fracturing fluid injected into the formation as well as the fluid injection rate and fluid viscosity; this information is evaluated against the above site specific considerations.

Fluid leak and recovery (flowback) of HF fluids.

Not all fracturing fluids injected into the formation during the HF process are recovered at the surface. Estimates of the fluids recovered range from 15-80% of the volume injected depending on the site (EPA 2010). Fluid movement into smaller fractures or other geologic substructures can be to a point where flowback efforts will not recover all the fluid or that the pressure reduction caused by pumping during subsequent production operations may not be sufficient to recover all the fluid that has leaked into the formation. Fracturing fluids can remain in the formation due to adsorption and chemical reactions, movement out of the capture zone, inadequate mixing, or from fracture collapse. It is noted that the fluid loss due to leakage into small fractures and pores is minimized by the use of cross-linked gels.

Willberg et al. (1998) analyzed HF flowback and described the effect of pumping rates on cleanup efficiency in initially dry, very low permeability (0.001 millidarcy) shale. Some wells in this study were pumped at low flowback rates (less than 3 barrels per minute (bbl/min)). Other wells were pumped more aggressively at greater than 3 bbl/min. Thirty-one percent of the injected HF fluids were recovered when low flowback rates were applied over a 5-day period. Forty-six percent of the fluids were recovered when aggressive flowback rates were applied in other wells over a 2-day period. In both cases, additional fluid recovery (10 percent to 13 percent) was achieved during the subsequent gas production phase, resulting in a total recovery rate of 41 percent to 59 percent of the initial volume of injected HF fluid. Ultimate recovery rate however, is dependent on the permeability of the rocks, fracture configuration, and the surface area of the fracture(s).

The ability of HF chemicals to migrate in an undissolved or dissolved phase into a usable water zone is likely dependent upon the location of the sealing formation (if any), the geology of the sealing formation, hydraulic gradients and production pressures.

HF fluids can remain in the subsurface unrecovered, due to “leak off” into connected fractures and the pores of rocks. Fracturing fluids injected into the primary hydraulically induced fracture can

intersect and flow (leak off) into preexisting smaller natural fractures. Some of the fluids lost in this way may occur very close to the well bore after traveling minimal distances in the hydraulically induced fracture before being diverted into other fractures and pores. Once “mixed” with the native water, local and regional vertical and horizontal gradients may influence where and if these fluids will come in contact with usable water zones, assuming that there is inadequate recovery either through the initial flowback or over the productive life of the well. Faults, folds, joints, etc., could also alter localized flow patterns as discussed below.

The following processes can influence effective recovery of the fracture fluids:

Check-Valve Effect

A check-valve effect occurs when natural and/or newly created fractures open and HF fluid is forced into the fractures when fracturing pressures are high, but the fluids are subsequently prevented from flowing back toward the wellbore as the fractures close when the fracturing pressure is decreased (Warpinski et al., 1988; Palmer et al., 1991a).

A long fracture can be pinched-off at some distance from the wellbore. This reduces the effective fracture length. HF fluids trapped beyond the “pinch point” are unlikely to be recovered during flowback and oil/gas is unlikely to be recovered during production.

In most cases, when the fracturing pressure is reduced, the fracture closes in response to natural subsurface compressive stresses. Because the primary purpose of HF is to increase the effective permeability of the target formation and connect new or widened fractures to the wellbore, a closed fracture is of little use. Therefore, a component of HF is to “prop” the fracture open, so that the enhanced permeability from the pressure-induced fracturing persists even after fracturing pressure is terminated. To this end, operators use a system of fluids and “proppants” to create and preserve a high-permeability fracture-channel from the wellbore deep into the formation.

The check-valve effect takes place in locations beyond the zone where proppants have been placed (or in smaller secondary fractures that have not received any proppant). It is possible that some volume of stimulation fluid cannot be recovered due to its movement into zones that were not completely “propped” open.

Adsorption and Chemical Reactions

Adsorption and chemical reactions can also prevent HF fluids from being recovered. Adsorption is the process by which fluid constituents adhere to a solid surface and are thereby unavailable to flow with groundwater. Adsorption to coal is likely; however, adsorption to other geologic material (e.g., shale, sandstone) is likely to be minimal. Another possible reaction affecting the recovery of fracturing fluid constituents is the neutralization of acids (in the fracturing fluids) by carbonates in the subsurface.

Movement of Fluids outside the Capture Zone

Fracturing fluids injected into the target zone flow into fractures under very high pressure. The hydraulic gradients driving fluid flow away from the wellbore during injection are much greater than the hydraulic gradients pulling fluid flow back toward the wellbore during flowback and production (pumping) of the well. Some portion of the fracturing fluids could be forced along the

hydraulically induced fracture to a point beyond the capture zone of the production well. The size of the capture zone will be affected by the regional groundwater gradients, and by the drawdown caused by producing the well. Site-specific geologic and hydrogeologic characteristics, injection pressure, and production pumping details should provide the information needed to estimate the dimension of the production well capture zone and the extent to which the fracturing fluids might disperse and dilute.

Incomplete Mixing of Fracturing Fluids with Water

Steidl (1993) documented the occurrence of a gelling agent that did not dissolve completely and actually formed clumps at 15 times the injected concentration in an induced fracture. Steidl also directly observed gel hanging in stringy clumps in many other induced fractures. As Willberg et al. (1997) noted, laboratory studies indicate that fingered flow of water past residual gel may impede fluid recovery. Therefore, some fracturing fluid gels appear not to flow with groundwater during production pumping and remain in the subsurface unrecovered. Such gels are unlikely to flow with groundwater during production, but may present a source of gel constituents to flowing groundwater during and after production.

IV. Geologic Hazards (including seismic/landslides)

Nevada is the 3rd most tectonically active state in the union. Since the 1850s there have been 63 earthquakes with a magnitude greater than 5.5, the cutoff for a destructive earthquake. Potential geologic hazards caused by HF include induced seismic activity in addition to the tectonic activity already occurring in the state. Induced seismic activity could indirectly cause a surficial landslide where soils/slopes are susceptible to failure. Landslides involve the mass movement of earth materials down slopes and can include debris flows, soil creep, and slumping of large blocks of material. Any destructive earthquake also has the potential to induce liquefaction in saturated soils.

Earthquakes occur when energy is released due to blocks of the earth's crust moving along areas of weakness or faults. Earthquakes attributable to human activities are called "induced seismic events" or "induced earthquakes." In the past several years induced seismic events related to energy development projects have drawn heightened public attention. Although only a very small fraction of injection and extraction activities at hundreds of thousands of energy development sites in the United States have induced seismicity at levels that are noticeable to the public, seismic events caused by or likely related to energy development have been measured and felt in Alabama, Arkansas, California, Colorado, Illinois, Louisiana, Mississippi, Nebraska, Nevada, New Mexico, Ohio, Oklahoma, and Texas.

A study conducted by the National Academy of Sciences (Induced Seismicity Potential in Energy Technologies, National Academy of Sciences, 2012) studied the issue of induced seismic activity from energy development. As a result of the study, they found that:

1. The process of hydraulic fracturing a well as presently implemented for shale gas recovery does not pose a high risk for inducing felt seismic events; and
2. Injection for disposal of waste water derived from energy technologies into the subsurface does pose some risk for induced seismicity, but very few events have been documented over the past several decades relative to the large number of disposal wells in operation.

However, a more recent study by the U.S. Geological Service has found that at some locations the increase in seismicity coincides with the injection of wastewater in deep disposal wells. Wastewater injection increases the underground pore pressure, which may, in effect, lubricate nearby faults thereby weakening them. If the pore pressure increases enough, the weakened fault will slip, releasing stored tectonic stress in the form of an earthquake. Even faults that have not moved in millions of years can be made to slip and cause an earthquake if conditions underground are appropriate (USGS 2014).

The potential for induced seismicity cannot be made at the leasing stage; as such, it will be evaluated at the APD stage should the parcel be sold/issued, and a development proposal submitted.

V. Spill Response and Reporting

Spill Prevention, Control, and Countermeasure (SPCC) Plans – EPA’s rules include requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires that operators of specific facilities prepare, amend, and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan (FRP) rule. Originally published in 1973 under the authority of §311 of the Clean Water Act, the Oil Pollution Prevention regulation sets forth requirements for prevention of, preparedness for, and response to oil discharges at specific non-transportation-related facilities. To prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil, the regulation requires the operator of these facilities to develop and implement SPCC Plans and establishes procedures, methods, and equipment requirements (Subparts A, B, and C). In 1990, the Oil Pollution Act amended the Clean Water Act to require some oil storage facilities to prepare FRPs. On July 1, 1994, EPA finalized the revisions that direct facility owners or operators to prepare and submit plans for responding to a worst-case discharge of oil.

In addition to EPA’s requirements, operators must provide a plan for managing waste materials, and for the safe containment of hazardous materials, per Onshore Order #1 with their APD proposal. All spills and/or undesirable events are managed in accordance with Notice to Lessee (NTL) 3-A for responding to all spills and/or undesirable events related to HF operations.

Certain oil and gas exploration and production wastes occurring at or near wellheads are exempt from the Clean Water Act, such as: drilling fluids, produced water, drill cuttings, well completion, and treatment and stimulations fluids. In general, the exempt status of exploration and production waste depends on how the material was used or generated as waste, not necessarily whether the material is hazardous or toxic.

VI. Public Health and Safety

The intensity, and likelihood, of potential impacts to public health and safety, and to the quality of usable water aquifers is directly related to proximity of the proposed action to domestic and/or community water supplies (wells, reservoirs, lakes, rivers, etc.) and/or agricultural developments. The potential impacts are also dependent on the extent of the production well’s capture zone and well integrity. Nevada’s Standard Lease Stipulations and Lease Notices specify that oil and gas development is generally restricted within 500 feet of riparian habitats and wetlands, perennial

water sources (rivers, springs, water wells, etc.) and/or floodplains. Intensity of impact is likely dependent on the density of development.

VII. Hydraulic Frac Job Data for Nevada.

Operator	Noble Energy	Noble Energy	Noble Energy	Makoil	Grant Canyon
Well	Humboldt M2C-M2-21	Huntington K1L-1V	Humboldt M10C-M10-11	Portugese Mountain 14A	Blackbur n #16
Total Base Water Volume (gal)	250,057	300,537	343,919	29,949	209,600
2% KCL Water	88.5614	0	86.45119	0	0
Fresh Water	0	88.9968	0	53.90215	85.2039
Water	1.57645	0.61826	0.81892	0.78169	0.53354
2-bromo-2-nitro-1, 3-propanediol	0.00202	0.00213	0.00358	0.00129	0.00171
Crystalline Silica, quartz	0.65036	8.59936	10.49356	32.39228	14.4277
Ethylene glycol monobutyl ether	0.02379	0.00537	0.01688	0.09718	0.02695
Isopropanol	0.00311	0.00351	0.00221	0.04926	0.00353
Methanol	0.00311	0.00353	0.00226	0.05782	0.00361

* Values are based on the percent of the total mass. These are the most common additives in all the jobs.

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Appendix G-Summary of Comments and Responses

BLM received written comments on the Preliminary EA from the following organizations during the August 17-September 4, 2018 comment period:

BMM: Bald Mountain Mine-Kinross

CBD et al.: Center for Biological Diversity, WildEarth Guardians, Sierra Club, Basin and Range Watch, and Western Watersheds Project

NDOW: Nevada Department of Wildlife

TRCP: Theodore Roosevelt Conservation Partnership

TWS: The Wilderness Society

BLM received additional written comments on the Preliminary EA from the CBD during the September 25-October 4, 2018 comment period.

Comments are summarized, with responses, in the table below.

From	Comment	Response
General		
NDOW	While NDOW is a strong proponent of mitigation, it is our understanding that IM 2018-093 has restricted the BLM's ability to require compensatory mitigation; however this document references mitigation in several locations as a mechanism for minimizing impacts.	Thank you for your comment. Mitigation remains part of the BLM strategy of avoid, minimize, and mitigate. IM 2018-093 restricts BLM's use of compensatory mitigation, but not project design features or COAs.
NDOW	Parcels 1-3 seem to be missing (they were included in the shapefile that was provided to NDOW).	These parcels are outside of the BFO boundary and are managed by the Winnemucca District Office.
BMM	The EA should also state that parcels in parcel group 3 overlap with pits, leach pads, waste rock storage facilities, haul roads and other facilities as the Bald Mountain Mine. Text should be added to the EA to explain that leased lands will be subject to the provisions of the Multiple Mineral Development Act.	Clarification has been added to the EA in section 3.3.12. A map of the Approved Plan of Operations can be found in Appendix A.
Water Resources		
CBD et al.	BLM must analyze where water will be sourced, how much, and the effects on water sources under different alternatives. All of these effects must be analyzed in the context of increasing water scarcity in Montana due to climate change, drought, and increasing population growth.	<p>The nominated parcels analyzed in this EA are in Nevada, not Montana.</p> <p>Groundwater and surface water quantity and quality were analyzed in the EA in sections 3.3.5, 4.2.4, and addressed in the Hydraulic Fracturing (HF) Whitepaper, Appendix F, to the extent possible at the leasing stage.</p> <p>The lease sale does not imply that all parcels will be leased, and lease sales do not guarantee a parcel will be explored or</p>

		exploited for oil. Water for drilling is sourced on a case by case basis. The quantity of water for drilling varies and the impact to local water sources is analyzed at the APD stage. Information about springs, seeps, and wetlands can be found at the NDWR website.
CBD et al.	Withdrawal of large quantities of freshwater from springs and other surface waters will undoubtedly have an impact on the environment. Withdrawing water from springs will decrease the supply for downstream users. Reductions in spring outflows may also lead to downstream water quality problems.	Waters of the State and withdrawals and use of these waters are managed by the Nevada Division of Water Resources and would be subject to existing water rights and uses.
CBD et al.	Additionally, localized effects of pumping need to be examined with close scrutiny for impacts to critical habitat adjacent to parcels proposed for leasing, because the parcels are located extremely close to the Duckwater spring complex. Even the slightest perturbation in the aquifers that give rise to the Lockes Ranch and Duckwater spring complexes poses an existential threat to the fish, and will result in adverse modification of its critical habitat.	The EA addressed potential impacts to water resources in Sections 3.3.5 and 4.2.4. The analysis determined that there were no significant impacts to water resources from the selected alternative. However, there could be indirect impacts to water resources from oil and gas development on these leases. To reduce potential conflicts with water resources from oil and gas leasing, the EDO evaluated parcels located within high-value habitat for significant water resources and proposed to apply additional stipulations and mitigation measures to future development activities. Once lease development is proposed, additional project and site-specific NEPA will be conducted to address any water resource issues and potential impacts specific to the site not addressed at the leasing stage. Furthermore, these activities would be subject to Best Management Practices (BMPs), state and federal regulations, and Conditions of Approval (COAs).
NDOW	<p>The information provide in the “Surface Water Resources” section is inadequate. Names of springs and streams should be provided along with map of adequate quality that shows the resources in relation to the parcels.</p> <p>The information provide in the “Wetland/Riparian Zones” section is inadequate. Names of springs and streams should be provided along with map of adequate quality that shows the resources in relation to the parcels. What constitutes a small percentage of the land?</p>	A map showing the parcels and USFWS wetlands, refuges and USGS perennial streams has been added to the EA in Appendix A?

CBD et al	<p>The EA lacks any analysis of the potential for fracking development on “group 3 parcels” to impact Ruby Lake National Wildlife Refuge, water quality and quantity flowing into the refuge from streams and springs in those parcels or along the refuge’s southern boundary, or bird, fish, or other wildlife populations therein. Nor does the EA evaluate the potential impacts of fracking industrialization along the refuge’s southern boundary on refuge visitor experience; indeed, the direct, indirect, and cumulative impacts of fracking industrialization of on lands flanking the refuge would fundamentally change the character of the valley, the visual backdrop to the refuge, and would increase air, water, light, noise, and traffic pollution, to the detriment of the experience of people using the refuge for photography, wildlife viewing, fishing, hunting, and other recreation.</p>	<p>Groundwater and surface water quality were analyzed in the EA in Chapter 3 & 4 and addressed in the Hydraulic Fracturing (HF) Whitepaper, Appendix F, to the extent possible at the leasing stage.</p> <p>Additional project and site-specific NEPA analysis would be performed at the project proposal (APD) stage. Any proposed HF project would be required to comply with the State of Nevada HF regulations, including casing and cementing design and disclosure of chemicals through FracFocus. HF and unconventional extraction methods are not widely used in Nevada; however, these may become more widely used with time and as more easily accessed resources become exhausted.</p> <p>Oil reservoirs are substantially deeper than water resources in Nevada. Groundwater aquifers are protected through construction requirements, requiring their isolation, and through ongoing testing of the integrity of the well.</p>
CBD	<p>BLM cannot rely on the Nevada State Engineer to review environmental impacts of awarding or changing water rights.</p>	<p>The BLM performs project and site-specific NEPA review of all proposed projects (Federal actions); this would include any proposed consumptive use of water as it relates to proposed exploration and development. However, waters of the State of Nevada are managed by the NV Division of Water Resources and the NV State Engineer. BLM does not regulate groundwater. Any water required for drilling or completion operations would be acquired by the operator in accordance with State law from an existing permitted appropriation, or from a temporary diversion or water well permit from the NV State Engineer. When any project is proposed on any parcel that is leased, additional site-specific, project-specific NEPA analysis would be conducted and mitigation measures and BMPs would be attached as COAs for each proposed activity.</p>
CBD	<p>The EA does not mention the potential or mechanism for consumption of water resources. BLM must analyze reasonably foreseeable and potentially catastrophic impacts to water quantity from fracking. Information as to projected time required to replenish the aquifer must be provided.</p>	<p>The mechanism for consumption of water resources is beyond the scope of this EA. The first measure of protection against polluting groundwater is through use of adequate, competent well casing. The second line of defense is through cementing of the various well casings used. Water quality is further protected by extending cementing to below the ground water elevation. Well casing</p>

		integrity testing is performed on oil and gas wells prior to use and during prescriptive maintenance to ensure isolation from groundwater aquifer formations. The Nevada Administrative Code 522.728 further defines duties of the operator for conducting hydraulic fracturing operations.
CBD	If fracking and drilling result from leasing, water contamination could impact human health and safety, agriculture, livestock and wildlife. Well casings may fail; also, fracking intentionally fractures formations and may allow additives or naturally occurring contaminants to enter groundwater. Accidental spills or leaks, or intentional dumping, of chemicals or wastewater can enter groundwater and contaminate surface water. The EA should analyze the likely frequency of such occurrences, and their consequences. Information as to the mix of additives to re-injected water must be provided.	<p>Groundwater and surface water quality were analyzed in the EA in Chapters 3 and 4 and also addressed in the Hydraulic Fracturing (HF) Whitepaper, Appendix E, to the extent possible at the leasing stage.</p> <p>Additional project and site-specific NEPA analysis would be performed at the project proposal (APD) stage. Any proposed HF project would be required to comply with the State of Nevada HF regulations, including casing and cementing design and disclosure of chemicals through FracFocus. HF and unconventional extraction methods are not widely used in Nevada; however, these may become more widely used with time and as more easily accessed resources become exhausted.</p> <p>Oil reservoirs are substantially deeper than water resources in Nevada. Groundwater aquifers are protected through construction requirements, requiring their isolation, and through ongoing testing of the integrity of the well.</p>
CBD	An APD filed for a proposed well in the Railroad Valley in 2016, the project proponent proposed utilizing surface flow from the adjacent Butterfield Spring for their drilling operations. This spring is home to the Railroad Valley tui chub, a BLM sensitive species. The proponent was to utilize up to 12,600 gallons of water every 24 hours, or some 8.75 gallons per minute, a substantial flow. The fish was protected by sealing the intake hose with ¼” grating. This is clearly an unacceptable set of circumstances for an endemic and BLM sensitive species.	This APD was never approved because of the points raised in your comment.
Air quality, GHG emissions, climate change		
CBD et al.	Under NEPA’s requirement to analyze indirect as well as direct impacts, BLM’s environmental review must therefore include not only emissions from drilling	Potential impacts and environmental consequences to air quality, climate change, and greenhouse gasses (GHG) were addressed in the EA to the extent possible at the leasing

	<p>operations, but the full “lifecycle” emissions from the transportation, refining, processing, leakage, and combustion of the oil and gas produced. It is reasonably foreseeable that this lease sale will induce oil and natural gas production, transmission and ultimate end-user climate change impacts. The effects of this induced production must be fully analyzed.</p> <p>BLM must fully and accurately analyze the impacts of increased oil and gas development on greenhouse gas (GHG) emissions and climate change prior to leasing.</p>	<p>stage in sections 3.3.1, 4.2.1 and Appendix F. This analysis included the potential indirect and cumulative impacts from future exploration and development including impacts from vehicle and equipment exhaust, increased particulate matter and dust from earthmoving activities, and potential fugitive gas and emissions from fossil fuel extraction, production, and combustion. The potential impacts of GHG emissions from oil and gas operations in Nevada are extremely low, based on the low amount of current production and projected production based on the reasonably foreseeable development scenario, as compared to State, National, and Worldwide consumption. Additional project and site specific NEPA would be conducted at the project proposal stage prior to approving any permits.</p>
CBD et al.	<p>For the proposed December 2018 lease sale, BLM must calculate the amount of greenhouse gas emissions that will result on an annual basis from (1) each of the fossil fuels that can be developed within the planning area; (2) each of the well stimulation or other extraction methods that can be used, including, but not limited to, fracking, acidization, acid fracking, and gravel packing; and (3) cumulative greenhouse gas emissions expected over the long-term (expressed in global warming potential of each greenhouse pollutant as well as CO2 equivalent), including emissions throughout the entire fossil fuel lifecycle discussed above.</p>	<p>Potential impacts and environmental consequences to air quality, climate change, and greenhouse gasses (GHG) were addressed in the RMP and the EA to the extent possible at the leasing stage in sections 3.3.1, 4.2.1 and Appendix F. Additional project and site specific NEPA would be conducted at the project proposal stage prior to approving any permits.</p>
NEPA, LUP Conformance and Oil and Gas Lease Policy Issues		
CBD et al.	<p>The December 2018 Lease Area is rich in wildlife habitat. BLM must disclose the resources implicated by each affected geographic area in order to fulfill its NEPA duty of informing the public and decision-makers about an action.</p>	<p>The EA disclosed what resources were present and affected in table 3.1 of the EA. Not all resources will be impacted.</p>
	<p>Under FLPMA, BLM is subject to a multiple-use and sustained yield mandate, which prohibits the Department of the Interior (DOI) from managing public lands primarily for energy development or in a manner that unduly or unnecessarily degrades other uses</p>	<p>The Purpose and Need for this EA responds to the requirement of the Mineral Leasing Act of 1920, as amended, that the BLM consider leasing of nominated areas if in conformance with the applicable land use plan. The proposed lease sale is in conformance with the Ely RMP.</p>

		<p>Multiple use management continues on leased lands. Leasing does not preclude other uses, such as renewable energy, exploration for other minerals, wildlife habitat management, etc. Any future exploration or development activity is required to comply with all applicable Federal, State, and local laws and regulations. Potential resource conflicts are addressed by stipulations and lease notices (Appendix D) and by additional project and site-specific NEPA analysis when a project is proposed.</p>
TWS	<p>Additionally, leasing lands with low potential for oil and gas development in particular violates FLPMA's multiple use mandate, and is also inconsistent with the MLA. The EA states that the need for the proposed action is to "respond to the nomination or Expressions of Interests (EOIs) for leasing, consistent with the BLM's responsibility under the Mineral Leasing Act (MLA)...to promote the development of oil and gas on the public domain." EA, p. 2.</p> <p>The EA provides no evidence that the proposed parcels contain oil or gas deposits, as required by the MLA.</p>	<p>All of the nominated parcels in this sale are open to oil and gas development per the 2008 Ely RMP. The Purpose and Need for this EA responds to the requirement of the Mineral Leasing Act of 1920, as amended, that the BLM consider leasing of nominated areas if in conformance with the applicable land use plan to promote the development of oil and gas on the public domain by responding to properly submitted Expressions of Interest (EOIs). Parcels may be nominated by the public, the BLM, or other agencies. The MLA establishes that deposits of oil and gas owned by the United States are subject to disposition in the form and manner provided by the MLA under the rules and regulations prescribed by the Secretary of the Interior, where consistent with land use planning, FLPMA and other applicable laws, regulations, and policies. The proposed lease sale is in conformance with the Ely RMP, as amended.</p> <p>Multiple use management continues on leased lands. Leasing does not preclude other uses, such as renewable energy, exploration for other minerals, wildlife habitat management, etc. Any future exploration or development activity is required to comply with all applicable Federal, State, and local laws and regulations. Potential resource conflicts are addressed by stipulations and lease notices (Appendix D) and by additional project and site-specific NEPA analysis when a project is proposed</p>
TRCP	An RMP revision should clearly articulate how provisions will be established for mitigation, including detailed wildlife monitoring and the	Thank you for your comment. This is outside the scope of the EA.

	use of adaptive management strategies to avoid, minimize or mitigate impacts of oil and/or gas exploration and development for future parcels offered for leasing.	
CBD et al.	BLM must take a hard look at the foreseeable, site-specific environmental impacts from this oil and gas lease sale. This includes analysis of impacts to greenhouse gas emissions and climate change, water resources, and species and habitats.	This is the purpose of the RFD scenario. Analysis of impacts to climate change, water resources, and species and habitats are documented in Chapters 3 and 4 of the EA and the Ely District RMP which this document is tiered to.
CBD et al.	The analysis of site-specific impacts must occur at the leasing stage, i.e. before BLM offers a lease for sale. This is because leasing is highly likely to result in development of the parcels at issue and production of fluid mineral resources.	Site specific analysis has been completed in Chapters 3 and 4 of this EA as well as the 2008 Ely RMP.
CBD et al.	It is entirely foreseeable that oil and gas activities will lead to significant environmental impacts. Even as early as this scoping stage, when BLM has not released data on the resource values particular parcels contain, a cursory glance at the maps reveal a number of resource issues raised by exploration and development. BLM must not move forward with leasing until it discloses these issues and analyzes the impacts from, and alternatives to, the December 2018 sale. For example, the “group 3” parcels abut and surround southern boundary of the Ruby Lake National Wildlife Refuge.	The reasonably foreseeable development which has been developed based on mineral potential, and historic development, is described in the EA and is the basis for analyzing potential future development and impacts.
TWS	BLM’s EA fails to adequately analyze even the reasonably foreseeable impacts from developing the lease parcels proposed in this sale.	<p>Analysis for the reasonable foreseeable impacts from developing the nominated parcels was discussed in Section 2.4 of the EA. Direct, indirect, and cumulative impacts are discussed in Chapters 3 and 4 of the EA. The RFD scenario was developed through the RMP process, based on historic exploration and development and potential future development technologies. The amount of disturbance and number of wells it predicts have not been exceeded at this time and, based on current drilling trends in Nevada, will remain valid during the period of the proposed action.</p> <p>The number of leases in effect in Nevada has</p>

		<p>been decreasing since 2008. The number of parcels offered is not directly correlated with the number of parcels sold or developed.</p>
TRCP	<p>The plan should fully integrate management and conservation measures required under the sage grouse Approved Resource Management Plan Amendment (ARMPA). Fulfillment of all sage grouse management requirements, including NSO stipulations in priority habitat, need to be addressed in the plan.</p>	<p>The 2015 ARMPA amended the Ely RMP. Though this amendment, the conservation measures, management requirements and stipulations outlined in the ARMPA were fully adopted by the Ely District and were fully incorporated into the Ely RMP.</p> <p>As part of the Proposed Action (leasing), stipulations are attached to all proposed parcels in PHMA, GHMA and near leks as specified in the GRSG Plan Amendment, including NSO stipulations in PHMA. Any future exploration or development proposal on a leased parcel would be required to conform to all stipulations attached to that parcel.</p>
CBD et al. TWS	<p>BLM must prepare an Environmental Impact Statement (“EIS”) examining site- specific impacts before reaching a decision</p>	<p>It was determined through the completion of this EA that there are not significant impacts to the environment and an EIS was not necessary. The EA analyzes the action of leasing the parcels, which has no direct impacts but increases the probability of future impacts on any parcel that is leased. BLM must evaluate potential effects of offering parcels for sale, without knowing which parcels will be leased or what exploration, development or production projects will be proposed on leased parcels in the future. Therefore the effects analysis must focus on identifying resources that are present and may be affected; applying protective stipulations to prevent or mitigate negative impacts to resources of concern; and predicting the nature and magnitude of effects under an RFD scenario based on recent, current and likely activities.</p>

TWS CBD et al.	BLM has not prioritized leasing outside of sage-grouse habitat, as required by the Record of Decision (ROD) and Approved Resource Management Plan Amendments for the Great Basin Region and Nevada and Northeastern California Approved Resource Management Plan Amendment (ARMPA). Under the Great Basin ROD, BLM must: prioritize oil and gas leasing and development outside of identified PHMAs and GHMAs.	On December 27, 2017, the BLM issued Instruction Memorandum 2018-026: Implementation of Greater Sage-Grouse Resource Management Plan Revisions or Amendments – Oil & Gas Leasing and Development Prioritization Objective, which provided new guidance as to how to implement the oil and gas leasing objectives found in the existing sage grouse ARMPAs. The policy clearly states that "the BLM does not need to lease and develop outside of GRSg habitat management areas before considering any leasing and development within GRSg habitat. This policy should allow for the BLM to efficiently conduct lease sales and permit oil and gas development while still protecting GRSg and GRSg habitat."
TRCP	The Ely RMP must also address the potential impacts to other important habitats due to behavioral displacement by development activities during seasonal stipulation periods. Any game migration corridors must also be identified and migration disturbance addressed, per Secretarial Order 3362.	Thank you for your comment. This is outside the scope of the EA.
CBD	Conformance with the preliminary injunction in <i>Western Watersheds Project v. Zinke</i> .	Please see the December 2018 sale Notice for the response to this comment.
CBD	Public Notice was not given for the additional 15-day comment period.	Postcards were sent to individuals on our oil and gas public mailing list and interested tribes to inform them of the additional comment period. CBD has never formally requested to be included on that mailing list.
Cumulative Effects		
CBD et al.	A proper cumulative impacts analysis must address not only BLM's recent, ongoing, and proposed leasing and development actions by BLM and other land management agencies.	Thank you for your comment. This is outside the scope of the EA. Analysis of cumulative impacts for this project are analyzed in Chapter 4.
TWS	BLM must consider the cumulative impact of all the recent and currently-planned oil and gas auctions in which BLM has offered or may offer hundreds of leases affecting sage grouse habitat and other resources.	Thank you for your comment. This is outside the scope of the EA. Analysis of cumulative impacts for this project are analyzed in Chapter 4. Projects in other states are outside of the cumulative effects study area for this project.

NDOW	Believes we left out projects in Table 4.1 that are reasonably foreseeable future actions.	Thank you for your comment.
Alternatives		
CBD et al.	BLM must thoroughly analyze the alternative of no new fossil fuel leasing and no fracking or other unconventional well stimulation methods within the Lease Area.	Thank you for your comment. The BLM appreciates CBD's comments and opinion on banning oil and gas leasing and hydraulic fracturing until a programmatic review is conducted. This request is outside the scope of the proposed action.
CBD et al.	BLM must at least consider an alternative that would exclude all GRSG habitat from its proposed lease sale.	<p>. In the BLM NEPA Handbook H-1790-1, and in CEQ guidance, the BLM is directed in NEPA documents to evaluate the proposed action, the no action alternative as a baseline, and other "Reasonable Alternatives" which meet the BLM's Purpose and Need and are within the BLM's authority. The BLM is not required to evaluate alternatives which do not meet the agency's Purpose and Need, are not within the BLM's discretion, or which are precluded by law. Allocation decisions such as closing lands to leasing or designating areas for NSO may only be made through the RMP amendment or revision process.</p> <p>The BLM reviewed all parcels to ensure that all allowable GRSG stipulations are applied. BLM is currently constrained by the terms of the 2015 GRSG Plan Amendment to apply habitat mapping and stipulations as identified in 2015. Application of stipulations beyond those provided in the 2015 GRSG Amendment would require a LUP amendment. However, lek locations are not mapped in the GRSG Plan Amendment, so BLM is free to use the most current lek information in applying the stipulations that address proximity to leks.</p>
CBD et al.	BLM must consider alternatives, including a no-leasing alternative.	The BLM did consider a no-leasing alternative, it is the No Action Alternative. The Ely RMP also analyzed an alternative to close all public land to commodity production.
TWS	<p>An alternative that defers leasing the proposed parcels until production in Nevada is on par with other western states.</p> <p>An alternative that defers leasing the proposed parcels until BLM demonstrates that these are</p>	The BLM is required by law under the Mineral Leasing Act of 1920, as amended, and under the regulations at 43 CFR 3100 to consider leasing areas that have been nominated for lease, if leasing is in conformance with the applicable land use plan(s). The proposed action with stipulations meets the Purpose and Need for the federal

	<p>“lands...which are known or believed to contain oil or gas deposits...” 30 U.S.C. § 226(a). As discussed later in these comments, the EA provides no evidence that the proposed parcels contain oil or gas deposits, as required by the Mineral Leasing Act</p>	<p>action and is in conformance with the existing Ely RMP, as amended. Allocation decisions such as closing lands to leasing or designating areas for NSO may only be made through the RMP amendment or revision process.</p>
TWS	<p>Unless provided with NSO stipulations, the BLM should defer leasing of any important elk, mule deer, pronghorn and habitats - including winter range, fawning areas, and migration corridors until a more comprehensive planning process can occur.</p>	<p>Right now these areas are open to leasing under the RMP for mineral development And stipulations have been applied to minimize impacts to resources. According to both federal laws and BLM policy, stipulations are to be the least restrictive measures compatible with protection of the resource. Allocation decision are made through the RMP amendment process.</p>
TRCP	<p>The EA only considers two choices for leases in big game winter range and other important habitats: timing limitations or no leasing. This is not a full range of alternatives and does not fully address wildlife and habitat impacts and needs. We recommend that the BLM fully consider a far greater breadth of stipulations and protection measures. We believe the adoption of no surface occupancy stipulations for big game winter range, fawning/calving habitats, migration corridors and other important habitats to address potential conflicts with important wildlife and sporting values in the Ely district are warranted.</p>	<p>Five alternatives were analyzed in the Ely RMP, one of which was closing all public lands to commodity production. In the BLM NEPA Handbook H-1790-1, and in CEQ guidance, the BLM is directed in NEPA documents to evaluate the proposed action, the no action alternative as a baseline, and other “Reasonable Alternatives” which meet the BLM’s Purpose and Need and are within the BLM’s authority. The BLM is not required to evaluate alternatives which do not meet the agency’s Purpose and Need, are not within the BLM’s discretion, or which are precluded by law. Allocation decisions such as closing lands to leasing or designating areas for NSO may only be made through the RMP amendment or revision process.</p>
TWS	<p>An alternative to protect wilderness resources from oil and gas impacts, through deferring lease parcels in lands with wilderness characteristics and/or offering those parcels with NSO stipulations.</p>	<p>There has not been a land use plan amendment to determine if or how these LWC units would be preserved to protect the wilderness characteristics. Until this occurs the EYDO is managing LWC under Manual 6320-Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (Public). This manual contains the BLM’s policy and guidance for considering lands with wilderness characteristics in the BLM land use planning process under FLPMA and other applicable law and supersedes all previous guidance on this topic.</p>
TWS	<p>The underlying Ely RMP never considered alternatives relevant to this lease sale, such as offering some but not all of the parcels considered here. Nor did the RMP consider the alternative of deferring all of these particular leases.</p>	<p>An alternative to offer some but not all of the parcels for sale was not analyzed because all of the nominated parcels are considered "open to leasing" under the Ely RMP. The RMP does not make a determination if lands should be deferred, only if they are open or closed to</p>

		development. The Ely RMP analyzed 5 alternatives which included not opening lands to mineral development.
TWS	Failing to consider alternatives that would protect other public lands resources from oil and gas development also violates FLPMA. Considering only one alternative in which BLM would offer all nominated oil and gas lease parcels for sale, regardless of other values present on these public lands that could be harmed by oil and gas development, would indicate a preference for oil and gas leasing and development over other multiple uses. Such an approach violates the agency's multiple use and sustained yield mandate.	<p>The Ely RMP analyzed five alternatives, one of which excluded all permitted, discretionary uses of public lands including mineral sale or development. In the BLM NEPA Handbook H-1790-1, and in CEQ guidance, the BLM is directed in NEPA documents to evaluate the proposed action, the no action alternative as a baseline, and other "Reasonable Alternatives" which meet the BLM's Purpose and Need and are within the BLM's authority. The BLM is not required to evaluate alternatives which do not meet the agency's Purpose and Need, are not within the BLM's discretion, or which are precluded by law. Allocation decisions such as closing lands to leasing or designating areas for NSO may only be made through the RMP amendment or revision process.</p> <p>Multiple use management continues on leased lands. Leasing does not preclude other uses, such as renewable energy, exploration for other minerals, wildlife habitat management, etc. Any future exploration or development activity is required to comply with all applicable Federal, State, and local laws and regulations. Potential resource conflicts are addressed by stipulations and lease notices (Appendix D) and by additional project and site-specific NEPA analysis when a project is proposed.</p>
Vegetation, forestry, fuels treatments, invasive species and noxious weeds		
NDOW	Vegetation Resources should be analyzed.	It was determined that since the lease sale would not authorize any surface disturbance and therefore, would not affect vegetation resources. Any future development on leased parcels would first require that site-specific NEPA analysis be completed pre-requisite to any potential surface disturbance activities being authorized.

Wildlife – Greater Sage-grouse

CBD et al.	The EA does not provide a list of which parcels contain sage-grouse habitat, which makes it difficult to understand the potential impacts of this sale on sage-grouse and which should be revised in the EA before the parcels are put up for auctions. Based on GIS analysis, we have identified sage-grouse habitat in the following 187 out of 210 proposed parcels	All parcels with GRSG habitat have been assigned stipulations to try and minimize impacts, stipulations can be found in Appendix D. Appendix C, the parcel list, includes what GRSG habitat types are present in each parcel at the end of the legal description.
	How many acres of habitat within 5.3 miles of a lek, the habitat where nesting occurs, occur on the leases in question? How many acres of identified sage-grouse winter range occurs on the leaseholds in question? The failure to consider the acreage of habitat lost due to abandonment of otherwise suitable habitats adjacent to roads and wellsites, and the failure to even quantify the amount of habitats critical to the life cycles of sage-grouse that occur on individual leases (much less evaluate the site-specific topography and how that might mitigate or exacerbate impacts of oil and gas development), constitute failures of NEPA's hard look requirements.	Map A14 in Appendix A shows where the winter habitat for GRSG is located in the project area. Stipulation #NV-L-16-C-TL was applied to parcels with GRSG Winter Habitat. The BLM conducted a thorough analysis on potential direct, indirect, and cumulative impacts to greater sage-grouse habitat from oil and gas exploration and development in the September 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (GRSG Plan Amendment) that amended the Ely RMP. This amendment defines mitigation and implementation strategies necessary to protect the bird's habitat. The EDO followed these instructions through the leasing process by attaching stipulations (Appendix D) to all proposed parcels in PHMA, GHMA, and near leks as specified in the GRSG Plan Amendment, and leasing outside of habitat first before considering leasing within habitat.
CBD et al.	The EA not only includes no site-specific analysis, it includes no analysis whatsoever of what sage-grouse populations and habitats will be affected, to what degree, and how those impacts may or may not be mitigated.	Analysis of impact to GRSG and their habitat are in sections 3.3.9 and 4.2.7 of the EA.
CBD et al.	The EA omits local or even regional sage-grouse population information and thus do not provide the public with the information necessary to assess the likely impacts of oil and gas leasing on GRSG in the lease area.	Analysis of impact to GRSG and their habitat are in sections 3.3.9 and 4.2.7 of the EA.

CBD et al.	Despite the presence of multiple active leks and habitat features, BLM has failed to (a) analyze impacts to sage-grouse habitats and populations under NEPA, (b) to apply appropriate stipulations to address concerns raised by NDOW and USFWS, and greater sage-grouse habitat.	Impacts to GRSg habitat was analyzed in sections 3.3.9 and 4.2.7 of the EA. Stipulation #NV-B-16-TL was applied to parcels containing GRSg Lekking Habitat. No Surface Occupancy would be allowed within 4 miles of active or pending GRSg leks from March 1-May 15.
CBD et al.	BLM's EA fails to provide any disclosure or analysis whatsoever of the impacts of the proposed action on the greater sage-grouse in the EA.	Impacts to GRSg from the Proposed Action are analyzed in sections 3.3.9 and 4.2.7.
CBD et al.	BLM must use the existing readily available data to identify which sensitive species that are of critical concern with regards to the lands included in, or in immediate proximity to, the proposed sale parcels. BLM must discuss any impacts to such species, including but not limited to native and federally threatened Railroad Valley springfish and GRSg.	GIS data from USFWS, NDOW and the NNHP is used to identify the locations of SSP and T&E species. The Railroad Valley springfish is not known to be present in any of the nominated parcels. Greater Sage-Grouse is not a federally listed species and was analyzed in sections 3.3.9 and 4.2.7
CBD et al.	NEPA and its implementing regulations requires BLM to analyze in detail indirect and cumulative impacts from oil and gas leasing and development on the Greater Sage-Grouse and its habitat.	Impacts to GRSg have been analyzed in sections 3.3.9 and 4.2.7 the EA.
CBD et al.	BLM's December 2018 EA fails to include any discussion of sage-grouse lek counts and lek count trends, identification of how many and which leks were in or near proposed lease sale parcels, whether hard or soft triggers under the 2015 ARMPA had been reached, what is known about sage-grouse use of seasonal habitat in the lease parcels, whether grazing allotments in the lease sale parcels currently meet Standards for Rangeland Health and what is known about migration of sage-grouse populations that use the lease sale parcels	Thank you for your comment. Your questions are outside the scope of the project. Stipulation #NV-B-16-TL was applied to parcels containing GRSg Lekking Habitat. No Surface Occupancy would be allowed within 4 miles of active or pending GRSg leks from March 1-May 15.
CBD et al.	We have compiled lists of greater sage-grouse leks in Nye and White Pine Counties, derived from Nevada Department of Wildlife 2016-2017 lek count data. We do not know which of these leks are within or within four miles of the lease parcels. We ask BLM to	Stipulation #NV-B-16-TL was applied to parcels containing GRSg Lekking Habitat. No Surface Occupancy would be allowed within 4 miles of active or pending GRSg leks from March 1-May 15.

	identify which of the listed leks are inside or within four miles of the lease parcels, and whether there are additional leks inside or within four miles of these lease parcels.	
Wildlife – Sensitive Species and T&E		
NDOW	There are four endemic springsnails to this area that could be affected by allowing leasing activities to proceed to drilling. The EA indicates 4 species known to occur within or near nominated parcels in Group 5 were included in the 14 Nevada Springsnails 12-month petition findings issued by the Fish and Wildlife Service on October 5, 2017.	Language was updated in section 3.3.9 of the EA responding to your comment
CBD et al.	BLM must consult with the Fish and Wildlife Service on any possible Endangered Species Act issues before offering parcels for lease. This includes analysis of impacts to the Railroad Valley Springfish and the Greater Sage-Grouse (“GRSG”).	The BLM reached out to the FWS in the beginning of the EA process. They did not identify any issues at that time involving the proposed parcels. We did not receive any communication with them during the public scoping period. The Railroad Valley Springfish is not located within any of the nominated parcels. Consultation would occur at the APD stage if necessary. GRSG are not a federally listed or candidate species, therefore consultation is not necessary with FWS concerning them.
Wildlife – General Wildlife Concerns		
NDOW	Please provide a list of wildlife species that are likely to be impacted.	Species likely to be impacted are in section 3.3.8 of the EA.
TRCP	There is no evaluation of indirect effects (i.e., behavioral modifications that could render surrounding habitat – possibly considerable distances from the site - unsuitable) from infrastructure and human activity particularly for sage-grouse, elk, mule deer, and pronghorn.	Indirect effects on wildlife were analyzed to the extent possible at this stage, based on best available habitat data and development projected in the RFD.
TRCP	There is no upfront solution for the impacts to big game migration and crucial winter or other seasonal range (direct AND indirect), beyond the fact habitat will be lost. We find this unacceptable.	Habitat and wildlife are analyzed to the extent possible and stipulations are applied to parcels at the leasing stage. Mitigation and Conditions of Approval would be analyzed and applied if necessary if and when development is proposed.
CBD et al.	Because oil and gas activities cause habitat destruction and fragmentation, BLM must use the best available data to analyze risks to wildlife and ecosystems that could foreseeably result from	Best available data regarding habitat and reasonably foreseeable development (RFD) was used to analyze potential indirect effects to wildlife and ecosystems. Additional project and site-specific analysis would take place if and

	leasing the December 2018 parcels.	when development is proposed.
TRCP	Proper planning should identify appropriate scales and ensure that development does not exceed levels that would cumulatively disturb and exacerbate impacts across the landscape unless earlier parcels are restored and impacts mitigated. Species of interest to hunters that would benefit from properly scaled development include mule deer, elk, pronghorn, and sage grouse.	Indirect effects on wildlife were analyzed to the extent possible at this stage, based on best available habitat data and development projected in the RFD.
CBD	Due to the potential for impacts to the Railroad Valley springfish and Pahrump poolfish, BLM is required to undergo a formal consultation with U.S. Fish and Wildlife Service, to comply with Section 7 of the Endangered Species Act.	On August 21, 2017 the Ely District BLM requested reinitiation of formal consultation with the Fish and Wildlife Service (FWS) of the District's Programmatic Biological Opinion (PBO) completed in 2008 as part of the Ely RMP. Reinitiation was requested to add species that had been listed and documented within the District since RMP was completed and to include updated information and effects analysis for oil and gas development and other programs. The BLM also requested concurrence for 7 listed species in various programs that were not included in the 2008 PBO. As a result of formal consultation with the FWS, it was determined that the actions analyzed "may affect, but are not likely to adversely affect, the Mojave desert tortoise, southwestern willow flycatcher, yellow billed cuckoo, Railroad Valley springfish, White River spinedace, White River springfish, Hiko White River springfish and Pahranaagat roundtail chub."
Stipulations and Best Management Practices		
NDOW	#7 Extraction of water should not be allowed in drought conditions regardless of the presence of special status species. Some springsnail species are not considered special status but will need the protection because of their inability to retreat to more wetted areas suitable to sustain life. Additionally, extraction should not be allowed to occur at point of origin for a spring or stream.	Waters of the state are managed by the Nevada Division of Water Resources.
NDOW	#5 Speaks to survey all mine adits and shafts for bats. Please something added to this section to include the survey of springs for the presence of amphibians, fish, and springsnails?	Surveys requested would take place if and when exploration or development is proposed.

NDOW	NDOW would request the BLM review the stipulations applied for wildlife, as we noted several errors, and it does not appear that the most up to data was used by the BLM, nor were stipulations accurately and consistently applied from one parcel to another.	The BLM has reviewed the stipulations applied for wildlife and errors were addressed. The BLM used the stipulations and data from the 2008 Ely RMP, 2015 Sage Grouse RMP amendment, and the 2017 District Programmatic Biological Opinion, as well as best available science when applying stipulations to parcels for the upcoming sale.
Wilderness Characteristics		
TWS	Thirty lease parcels in the December lease sale overlap with lands with wilderness characteristics that the agency has inventoried but not made management decisions for in a land use plan. EA, p. 24. BLM should defer leasing in inventoried lands with wilderness characteristics until the agency has considered protective management for those units in a land use planning process with public input.	The Nevada BLM published the original draft wilderness review in 1979, and issued the intensive wilderness inventory decision in 1980. In 2011, the Ely District Office BLM began updating the lands with wilderness characteristics (LWC) inventory on a project-by-project basis until there is a land use plan revision. There has not been a land use plan amendment to determine if or how these LWC units would be preserved to protect the wilderness characteristics. Until this occurs the EYDO is managing LWC under Manual 6320-Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (Public). This manual contains the BLM's policy and guidance for considering lands with wilderness characteristics in the BLM land use planning process under FLPMA and other applicable law and supersedes all previous guidance on this topic.